DOCUMENT RESUME

ED 265 756 HE 018 746

TITLE	The Changing Functions of Higher Education: Implications for Innovation. Reports from the 1984 OECD/Japan Seminar on Higher Education.
INSTITUTION	Hiroshima Univ. (Japan). Research Inst. for Higher Education.
PUB DATE	Mar 85
NOTE	235p.
AVAILABLE FROM	Hiroshima University, Research Institute for Higher Education, Naka-ku, Higashisenda-machi, Hiroshima City, Japan 730.
PUB TYPE	Collected Works - Conference Proceedings (021) -- Viewpoints (120) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC10 Plus Postage.
DESCRIPTORS	College Faculty; *College Instruction; College Programs; College Role; College Students; *Curriculum Development; *Educational Change; Educational Innovation; *Foreign Countries; *Higher Education; Independent Study; Inservice Teacher Education; International Educational Exchange; Open Universities; Secondary Education; Teacher Attitudes; Technical Institutes
IDENTIFIERS	*Japan; Sweden; United Kingdom; *United States; West Germany

ABSTRACT

College curricula and instruction, differentiation, and innovation and change in American and Japanese higher education are discussed in 18 papers presented at the 1984 international seminars of the Organization for Economic Co-operation and Development (OECD). Higher education in three European countries is also addressed. Titles and authors include: "New Implications for the Educational Function of the Japanese University" (Kazuyuki Kitamura); "Curriculum and Teaching in Japanese Universities: A Report of RIHE National Surveys" (Masao Seki, Yuji Matsunaga, Fumihiro Maruyama); "Curriculum and New Forms of Teaching" (Theodor Berchem); "University Support for Independent Learning: A New Development in Inservice Education of Teaching (INSET)" (Peter Posch); "Universities and Non-University Higher Education in Japan" (Taijun Saito); "Differentiation within a Unitary Higher Education System: Some Experiences of the Swedish Model" (Ulla Ahgren-Lange); "The University as Repository of Unsolved Social Problems: Shortcomings of Human Capitalism" (Sigurd Hollinger, Walter Steinbacher); "The Differentiation between University and Other Forms of Higher Education in the United Kingdom with Particular Reference to the English Polytechnics" (J. H. Thompson); "Innovation in Japan's New-Type (Shinkoso) Universities: The Experience of Three Universities" (Shinroku Saito); "What Are the Main Innovative Features of New (Reform) Universities and Other New Institutions of Higher Education and What Is Their Impact, if Any, on Traditional Institutions?" (Leslie Wagner); "Reflections on American Higher Education: Expansion and Decline (Ernest L. Boyer); "American Education: Hope Amid Change" (E. Boyer); "Secondary Education in America: Priorities for Reform" (E. Boyer); The Educational Function of the University: An Historical Perspective" (Arthur Levine); "Higher Education in an Age of Decline" (A. Levine); "The Puzzle of Higher Education in Japan: A Response" (Nobuo Shimahara); "The Internationalization of Japanese University Students: A Study" (John J. Cogan); and "The Guidance of Foreign Graduate Students in Japanese Universities: A Look at the Organizations and Persons Responsible" (Joseph E. Hicks). (SW)

ED265756

Reports from the 1984 OECD JAPAN Seminar
On Higher Education

THE CHANGING FUNCTIONS OF HIGHER EDUCATION

Implications for Innovation

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Research Institute for Higher Education, Hiroshima University

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

NE 018746

1984
Research Institute for Higher Education
HIROSHIMA UNIVERSITY

The Changing Functions of Higher Education
– Implication for Innovation –

Edited and Published by:
Research Institute for Higher Education
Hiroshima University
Naka-ku, Higashisenda-machi
Hiroshima City, Japan 730
Telephone: 082–243–7193
Printed by:
Nishiki Printing Co., Ltd.
5–33 Shoko-center, Nishi-ku,
Hiroshima 733, Japan

March 1985

Preface

The OECD/CERI co-development project on Innovation in Higher Education was set down in 1979. The RIHE took on a cooperative role in this project as one of its major research projects. The RIHE chose the following main theme; A Comparative Study on Innovation in Higher Education – with special emphasis on curriculum development and teaching methods. The principal reason for choosing this theme was that in spite of the rapid large scale expansion of Higher Education in Japan, there were considerable problems with the quality of university education for example, low student motivation, unsystematic curricula and faculty indifference towards teaching.

In the past four years two international seminars have been held at both Hiroshima and Tokyo and in addition to these, for the past four years at all of our RIHE annual research conferences, the overall focus has been on the teaching function of the university and considerable research has been done on this same topic by RIHE staff and our affiliated researchers.

This report principally comes from the 1984 International OECD/CERI Japan Seminar and is the third in a series of publications which were generated by these seminars.

This issue is divided into four parts, the first part being papers given at the Hiroshima session, the second part from the Tokyo session, the third part a collection of papers from guest speakers at the Tokyo and Hiroshima open lecture sessions and the fourth part several papers related to recent problems in Japanese Higher Education. These were added to introduce new trends on Japanese Higher Education problems to our English speaking audience.

I would like to express my gratitude to the authors of all of the articles appearing in this issue. In addition special thanks should be given to Dr. G.S. Papadopoulos the OECD/CERI Deputy Director of Education for support during all phases of this project. We also thank Dr. I. Amagi the Chairman of OECD/CERI for his invaluable assistance. Finally I would like to extend thanks to the Japanese Ministry of Education, Science and Culture for their vital cooperation in our research activities.

Michiya Shimbori
Director R.I.H.E.
Hiroshima University

THE CHANGING FUNCTIONS OF HIGHER EDUCATION

– Implications for Innovation –

Preface ..... Michiya Shimbori i

Program of the 1984 OECD/JAPAN Seminar on Higher Education ..... v – viii

List of Participants ..... ix – xi

Part I **Curriculum and Teaching**

1. New Implications for the Educational Function of the Japanese University
   by Kazuyuki Kitamura ..... *3 – 12*
2. Curriculum and Teaching in Japanese Universities: A Report of RIHE National Surveys
   by Masao Seki, Yuji Matsunaga and Fumihiro Maruyama ..... *13 – 29*
3. Curriculum and New Forms of Teaching
   by Theodor Berchem ..... *30 – 41*
4. University Support for Independent Learning
   – A New Development in Inservice Education of Teaching (INSET)
   by Peter Posch ..... *42 – 51*
5. Concluding Remarks for the Hiroshima Session
   by Keith Clayton ..... *52 – 57*

Part II **Differentiation and Innovation**

1. Universities and Non-University Higher Education in Japan
   by Taijun Saito ..... *61 – 66*
2. Differentiation within a Unitary Higher Education System
   – Some Experiences of the Swedish Model
   by Ulla Åhgren-Lange ..... *67 – 72*
3. The University as Repository of Unsolved Social Problems
   – Shortcomings of Human Capital-ism
   by Sigurd Höllinger and Walter Steinbacher ..... *73 – 82*

4. The Differentiation Between University and Other Forms of Higher Education in the United Kingdom with Particular Reference to the English Polytechnics
by J.H. Thompson ..... *83 – 93*

5. Innovation in Japan's New-Type (Shinkoso) Universities
– The Experience of Three Universities
by Shinroku Saito ..... *94 – 103*

6. What Are the Main Innovative Features of New (Reform) Universities and other New Institutions of Higher Education and What Is Their Impact, if Any, on Traditional Institutions?
by Leslie Wagner ..... *104 – 113*

7. Summary and Conclusion
by G.S. Papadopoulos ..... *114 – 119*

Part III **Changes in American Higher Education**

1. Reflections on American Higher Education: Expansion and Decline
by Ernest L. Boyer ..... *123 – 134*

2. American Education: Hope Amid Change
by Ernest L. Boyer ..... *135 – 144*

3. Secondary Education in America: Priorities for Reform
by Ernest L. Boyer ..... *145 – 152*

4. The Educational Function of the University: An Historical Perspective
by Arthur Levine ..... *153 – 159*

5. Higher Education in an Age of Decline
by Arthur Levine ..... *160 – 164*

Part IV **Perspectives on Japanese Higher Education**

1. The Puzzle of Higher Education in Japan: A Response
by Nobuo Shimahara ..... *167 – 174*

2. The Internationalization of Japanese University Students: A Study
by John J. Cogan ..... *175 – 198*

3. The Guidance of Foreign Graduate Students at Japanese Universities
– A Look at the Organizations and Persons Responsible
by Joseph E. Hicks ..... *199 – 219*

PROGRAM

of

The 1984 OECD/JAPAN Seminar on Higher Education

Umbrella Theme:	The Changing Functions of Higher Education and Implications for Innovation
Period:	23rd – 28th, January 1984
Places:	Hiroshima and Tokyo
Co-sponsored by:	Hiroshima University (Research Institute for Higher Education, RIHE) Ministry of Education, Science and Culture, Japan Organization for Economic Co-operation and Development/ Center for Educational Research and Innovation (OECD/CERI)
Title of the Project:	OECD/CERI Co-Development Program – Inter-country Exchange and Co-operation on Innovative Approaches to Higher Education

– Schedule –

23rd Jan. (Monday) [Administration Building, 6th floor, Hiroshima University]

10:00-10:30 Visit to Research Institute for Higher Education (RIHE)

10:30-12:00 **Opening Ceremony and Orientation**

(1) Welcome address by Mr. Masahiro Yorizane
(President of Hiroshima University)

(2) Remarks by Mr. Isao Amagi
(Chairman of the OECD/CERI Governing Board and Special Advisor to the Minister of Education, Science and Culture, Japan)

(3) Introduction into the Topics of the Seminar and CERI Co-Development Program by Mr. George Papadopoulos
(Deputy Director of the OECD/CERI)

(4) Orientation to the Japanese Seminar Program by Mr. Keiji Inaga (Director, RIHE) and
Mr. Kazuyuki Kitamura (Professor, RIHE)

12:00-13:00 Courtesy visit to President of Hiroshima University and Lunch [President's Office]

14:00-17:00 **Open Lectures**

(1) Mr. Ernest Boyer
(President, Carnegie Foundation for Advancement of Teaching, U.S.A.)
"The Services of the University: 1984"

(2) Mr. Arthur Levine
(President, Bradford College, U.S.A.)
"The Educational Function of the University: An Historical Perspective"

18:00-19:30 Cocktail Party [Gekkaden Hall]

Hiroshima Seminar

25th Jan. (Wednesday) [Akebono, 2nd floor, Hiroshima City Hotel]

Topic (A): Curriculum and Teaching in Higher Education

9:00-12:00 **Morning Session: Reports and Discussion on Findings of Japanese Research Group (RIHE)**

Chairman: Mr. Hisashi Shikibu (Japan)

(1) New Implications for the Educational Function of the Japanese University
by Mr. Kazuyuki Kitamura (Professor, RIHE)

(2) Teaching and Curriculum in Japanese Universities
– A Report of RIHE National Surveys
by Mr. Masao Seki (Professor, RIHE)
Mr. Yuji Matsunaga (Research Associate, RIHE)
Mr. Fumihiro Maruyama (Research Associate, RIHE)

(3) Comments on RIHE Findings
by Mr. Lennart Levin (Sweden)

14:00-15:00 **Afternoon Session: Reports and Discussion on OECD Member Country Cases**

(4) Federal Republic of Germany
by Mr. Theodor Berchem

(5) Austria
by Mr. Peter Posch

18:00-19:30 Reception given by President of Hiroshima University

Tokyo Seminar

27th Jan. (Friday) [Asonoma, Tokai Club, Kasumigaseki Building, 33rd floor]

Topics (B): Why and how do various countries differentiate between university education and other forms of higher education?

9:00-12:00 **Presentations and Discussions**

Chairman: Mr. Isao Amagi (Japan)

Reporters:

(1) Japan: Mr. Taijun Saito
(2) Sweden: Mr. Ulla Åhgren-Lange
(3) Austria: Mr. Sigurd Höllinger
(4) United Kingdom: Mr. J.H. Thompson

14:00-17:00 Topics (B) continued.

Topics (C): What the the main innovative features of new (reform) universities and other new institutions of higher education and what is their impact, if any, on traditional institutions?

Presentations and Discussions

Reporters:

(5) Japan: Mr. Shinroku Saito
(6) United Kingdom: Mr. Leslie Wagner

17:00-18:00 (1) Summary and Conclusion of the OECD/Japan Seminar and discussion of future plan
by Mr. George Papadopoulos, OECD

(2) Closing remarks

18:00-19:30 Reception given by the Ministry of Education, Science and Culture

LIST OF PARTICIPANTS

I. Foreign Participants

Ulla Åhgren-Lange	Adviser to the Chancellor, the National Board of Universities and Colleges, Sweden
Ernest L. Boyer	President, the Carnegie Foundation for the Advancement of Teaching, U.S.A.
K.M. Clayton	Professor of Environmental Sciences, University of East Anglia, U.K.
Sigurd Hollinger	Head, Bureau of Planning and Statistics, Ministry for Science and Higher Education, Austria
Otto Kramer	Deputy Director-General, Ministry of Science and Arts, Baden-Würtemberg, Germany
Lennart Levin	Head, R & D Unit, National Board of Universities and Colleges, Sweden
Arthur Elliott Levine	President, Bradford College, U.S.A.
G.S. Papadopoulos	Deputy Director for Education, OECD/CERI
Peter Posch	Professor, University of Klagenfurt, Austria
J.H. Thompson	Under-Secretary, International Relations Branch, Department of Education and Sciences, U.K.
Leslie Wagner	Professor, National Advisory Body for Local Authority Higher Education, U.K.
Theodor Berchem	President, the West German Rectors Conference, Germany

II. Japanese Participants (Hiroshima Seminar)

Yoshiya Abe	Professor, Center for Development of Broadcasting Education
Ikuo Amano	Associate Professor, University of Tokyo
Ryuichi Hirano	President, National University Association of Japan, (President, University of Tokyo)
Fujio Ikado	Professor, Institute of Philosophy, University of Tsukuba
Hideo Ikeda	Professor, Faculty of Education, Hiroshima University
Keiji Inaga	Director, Research Institute for Higher Education, Hiroshima University

Kazuyuki Kitamura	Professor, Research Institute for Higher Education, Hiroshima University
Fumihiro Maruyama	Research Associate, Research Institute for Higher Education, Hiroshima University
Yuji Matsunaga	Research Associate, Research Institute for Higher Education, Hiroshima University
Masao Seki	Professor, Research Institute for Higher Education, Hiroshima University
Hisashi Shikibu	Professor, Faculty of Integrated Arts and Sciences, Hiroshima University
Michiya Shimbori	Professor, Faculty of Education, Hiroshima University
Yasumasa Tomoda	Associate Professor, Faculty of Human Sciences, Osaka University
Tohru Umakoshi	Associate Professor, Research Institute for Higher Education, Hiroshima University
Hirotoshi Yamasaki	Research Associate, Research Institute for Higher Education, Hiroshima University
Masahiro Yorizane	President, Hiroshima University
Masakazu Yano	Associate Professor, Research Institute for Higher Education, Hiroshima University

III. Japanese Participants (Tokyo Seminar)

Yoshiya Abe	Professor, Center for Development of Broadcasting Education
Isao Amagi	Special Adviser to the Ministry of Education, Science and Culture
Ikuo Amano	Associate Professor, University of Tokyo
Koreo Kinoshita	President, Gakushuin University
Kazuyuki Kitamura	Professor, Research Institute for Higher Education, Hiroshima University
Muneharu Kusaba	Director, Educational and Cultural Exchange Division, Science and International Affairs Bureau, Ministry of Education, Science and Culture

Yasuhiro Maehata	Director, Higher Education Planning Division, Higher Education Bureau, Ministry of Education, Science and Culture
Kan-ichi Miyaji	Director-General, Higher Education Bureau, Ministry of Education, Science and Culture
Kikuo Nishida	Director, Kisarazu Technical College
Jun Ohnuma	President, Bunka Women's College
Hitoshi Ohsaki	Director-General, Science and International Affairs Bureau, Ministry of Education, Science and Culture
Shinroku Saito	President, University of Technology and Science of Nagaoka
Taijun Saito	Deputy Director-General, Higher Education Bureau, Ministry of Education, Science and Culture
Tadashi Satoh	Vice-president, University of Tsukuba
Masao Seki	Professor, Research Institute for Higher Education, Hiroshima Univer
Yuichi Yamamura	President, Osaka Un.versity
Masahiro Yorizane	President, Hiroshima University
Observers	45 persons

PART I

CURRICULUM AND TEACHING

NEW IMPLICATIONS FOR THE EDUCATIONAL FUNCTION OF THE JAPANESE UNIVERSITY

Kazuyuki Kitamura*

I

As a coordinator of the Japanese research group, a joint research team organized in 1980 by Hiroshima University's Research Institute for Higher Education (RIHE) under the title of "A Comparative Study on Innovations in Higher Education – With special emphasis on Curriculum Development and Teaching Method", we would like to report our major findings from our three years research. Our Report is composed of two parts. The first part is an introductory paper in which we try to explain our basic assumptions and perspectives on this topic in the context of contemporary Japanese higher education. I will try to make clear why the educational function of the Japanese university must be re-examined now, what kinds of new problems we are facing, and what we should do for the improvement of university education. In the second part, Professor Seki and associates will explain several important facts on curriculum and teaching in Japanese universities based on our national surveys, and present several major points for discussion. We hope our reports may be a fruitful source for our discussion.

II

Formally speaking, the "Education" function of Japanese universities has a primary status in comparison with the function of "research". Article two of the School Education Law defines the characteristics of the university "as a center of learning", and states that the purpose of the university is to "aim at teaching and studying deeply professional learning and technical arts as well as giving a broad knowledge and developing the intellectual, moral and practical abilities". In most of the official regulations, the primary educational role of the university is always stressed over other roles.

However, in reality, more university professors consider "research" as their primary responsibility rather than "teaching". According to the findings of our RIHE

* Professor, Research Institute for Higher Education, Hiroshima University, Hiroshima, Japan

national survey on institutional management in higher education in Japan,[1] most academic staff prefer to devote more time to research rather than to teaching, and research is always given primary emphasis, while teaching is considered secondary.

More dramatic evidence of the research-oriented tendency among Japanese professors was made clear from another RIHE national survey of opinion concerning Japanese higher education among foreign teachers at Japanese universities and colleges in 1979.[2] According to the findings, nearly 80 per cent of the foreign teachers consider that Japanese professors are much more "research-oriented" than "teaching-oriented". Additionally, it is quite shocking to find that many of the foreign teachers at Japanese universities are extremely critical to the attitude of Japanese professors. Their criticisms can be summarized in the following:

(1) In general, Japanese professors respect research more than teaching and identify themselves as researchers rather than teachers. Their interest in teaching is perceived to be relatively low and not much attention is given to class instruction.

(2) In Japanese universities, there is almost no organized and structured curriculum. Most of the courses and programs seem to be organized according to the convenience of the professors and not necessarily according to the students' needs.

(3) Teaching methods and patterns are too uniform and inflexible. Very little consideration has been paid to the improvement of teaching methods and schedules which may not be suitable to teaching particular subjects, for instance, languages.

(4) In comparison with American and European universities, few institutional and individual considerations have been given to the teaching function at Japanese universities. There are no staff-development centers. Very little research on teaching and learning in higher education has been conducted in Japan. Very few professors have shown any interest in this issue.

More severe criticism of the university education in Japan was widely publicized recently in a *New York Times* article by an American professor who has spent four years at Japanese universities. This article carried the shocking title, "Japan's Noneducation".[3] In his essay, the author wrote: "Although Japanese students demonstrate superiority in certain elementary and secondary school tests, their advantage slips drastically at the university level." He pointed out several weaknesses of Japanese universities, such as low rates of student class attendance, high incidences of class cancellation by professors, high grade inflation and so on. He concluded that "the combination of Japanese elementary and secondary education and corporate training seems to compensate for the emptiness of the Japanese university". In spite of these facts,

he said, "no one in Japan takes them seriously – not the students who nominally attend, nor the professors who nominally teach".

Such criticism is in sharp contrast to the high marks given to other levels of Japanese education by foreign critics. On the one hand it is generally recognized that Japanese primary and secondary schools are "among the most effective in the world".[4] On the other hand, the quality of Japanese universities is considered "far below" than that of American institutions of higher education.[5]

The question we must ask ourselves is whether this severe criticism concerning the educational weakness of Japanese universities can be accepted, and, if so, to what degree; or, if not, how should we defend ourselves against this outside criticism?

III

Though there are several of these points with which we would take issue and defend ourselves against this outside criticism, at the least we must admit that there has been very little concern with curricula and teaching on the part of Japanese university professors. As is evident from the findings of our national opinion survey of deans and professors in Japanese universities conducted by RIHE in 1982,[6] even at the institutional level, very few systematic efforts for improvement in teaching and curricula, as well as in the study and evaluation of the educational process have been undertaken in Japanese higher education.

One of the major sources of the lack of concern with teaching function among Japanese professors seems to have come from a traditional concept which distinguished "a school" as "a place for education" as against "a university" as "a place for scholarship". According to Arinori Mori, the first Education Minister (1885-1889) in the Meiji Central Government, "a school" is an institution in which pupils' learning is heavily dependent upon the aid of others (teachers), while a university is an institution in which students are studying independently with little aid from others (teachers).

Because the university was considered the institution of *higher* education which accepted only qualified students who need little instruction, those students admitted by a university were considered to be members of an elite group who were supposed to have both definite goals for study and the capacity to learn independently; therefore, they were presumed to have the least special need for teacher assistance.

In addition, another traditional concept of the university reinforced the downplaying of the teaching function. This was the idea that the functions of both research and teaching are in harmony, cannot be separated, and that they are not in a conflict

relationship with each other. Thus the professors' research activities automatically contribute to their students' progress in education. According to this theory, what professors should do is to deepen their research and scholarly activities and "to profess" what they have investigated without special regard with "how to teach" students. This is because it is totally the students' responsibility to learn something from what professors "profess" and then to integrate what they obtained from various academic offerings into the total educational experience of their own college life.

Although these traditional concepts of university education were established at a small number of elitist universities (fewer than ten institutions) before World War II, this consciousness has continued without modification among a great number of new professors at new universities and colleges which were created just after the Second World War. This consciousness is still now prevalent among most of university professors (120,000 full-time faculty members) at almost one thousand universities and junior colleges in Japan.

IV

After the unprecedented rapid expansion of higher education in Japan during the past two decades, a sort of change and diversification among student applicants began to appear from the mid-1970's. The optimistic assumption that there would be an almost endless increase of student applicants suddenly became doubtful. Increasingly, more students are now choosing non-collegiate types of post-secondary educational institutions such as vocational and technical schools (called "senshû-gakko"). On the other hand, during the past five years, there has been a slight decline in the rate of college-age students attending colleges.[7] Changes in students' college choices and career aspirations seem to be extremely responsive to changes in society; such changes include the introduction of new entrance examination systems, shifts in employment market trends, as well as other social and economic changes. After the mid-1970's, and increasingly in the 1980's, it has become much more difficult for Japan's universities to obtain enough resources both from public and private sources. In this generally unfavorable situation there is a growing dissatisfaction with the university education among many college students. Several empirical findings show that many students spend most of their college days very passively without any serious motivation for independent learning. They find their curriculum irrelevant and are disappointed by the classes and lectures at the universities to which they were admitted.[8]

In spite of the fact that structural changes in university education are necessary due to great diversity in students' attitudes and needs, almost no major changes or reforms have occurred in either the traditional structure of the university or in the professors' attitudes towards university education. Professors who have not been able to attract students to their lectures attempt to find their identity in "research", while students who have found no interest in formal curricula and instruction attempt to find their identity in "extra-curricular" activities. Thus, what can be called "alienation from teaching and learning" among both professors and students exists in Japanese universities. It is not a new phenomenon.

In this situation, an increasing number of professors are faced with new educational difficulties: how does one deal with students who are weakly motivated and generally dislike study, who have a passive attitude toward their classes and obscure goals for their academic life and future career goals and who are living examples of general decline in academic ability?

The increase of such students is now gradually undermining the professors' antiquated premise that college students are well qualified to learn independently without the aid of "others" (teachers), and that students can design their own curriculum according to their academic goals, and integrate all of the findings they obtained from various specialized academic offerings into their whole educational experience. More and more professors are now forced to recognize that this old assumption is a myth and that some kind of innovative educational and teaching approaches are becoming necessary for college teachers. Gradually, however, there is a growing interest among college professors in curriculum and teaching reforms which should help to offset these educational difficulties.

V

In his *Academic Revolution* (1968), David Riesman described the process of the rise to power of the academic profession in American higher education. In 1980, he published *On Higher Education,* in which he predicted the rise of student consumerism in the near future.[9] According to Clark Kerr, who wrote the preface to this book, this shift from academic merit to student consumerism is one of the two greatest reversals of direction in the entire history of American higher education. Because of the coming demographic decline, decreased financial support, and rising costs, Riesman said, students are now turning from being "supplicants for admission" to "courted customers", and students are gaining increased market power while faculty influence

is declining. In an era of student hegemony, more and more students are increasingly becoming "passive consumers" who want to buy only easily obtained educational services sold at "academic supermarkets" without designing curricula and integrating their own education as "active producers". Riesman believes that it is necessary to make the effort not to surrender to prevailing moods of large-scale faculty demoralization and the desires of students to be entertained and awarded degrees after little efforts. In conclusion, he said that students are at once the producers and the consumers of their own educational development. One of the major aims of that development is to help students become more active producers, and less passive and simply receptive consumers. It seems that he believes this will be the central task and purpose of higher education in the era of rising student consumerism in the United States.

If we analyze in comparative perspective Riesman's view on these historical reversals which are occurring in the United States, we may find some implications for the future direction of Japanese higher education. I believe that in Japan also there are certain signs of a historical transition from the stage of "the University of Teachers" to "the University of Students". "The University of Teachers" means a traditional university where academics have supreme powers over students, which are legally justified and protected by the concept of "academic freedom" and "faculty autonomy". The professors at a Japanese university have substantial powers not only in the academic affairs of teaching and research but also in governance and administration. Because the professor is the *producer* of learning, research (the production of learning) has been emphasized much more than teaching (the transmission of learning). Thus the recruitment and the promotion of professors are based on their academic productivity and achievements rather than on their teaching ability. The curriculum, requirements and assessments, as well as admission standards, are also determined by the faculty members' needs and conveniences and based on academic disciplines rather than on students' needs and social demands. At "the University of Teachers", students are treated as if they were well qualified young adults who have already set definitive goals and as if they were active producers who can design their own curricula and can integrate what they have learned from various fragmented academic offerings given by individual professors without any coordination among colleagues. Thus the faculty find no special need to master any special teaching methods and skills in order to better meet their students' needs.

If "the University of Teachers" is the traditional model of Japanese universities,

there are also many examples of "the University of Students". At "the University of Students", the major function of the university is to service the needs and interests of students as clients; more emphasis is put on teaching rather than research, so that faculty members are evaluated by students according to their teaching ability. In order to prevent the universities from losing student enrollments, curriculum is organized according to the students' needs and social demands. At "the University of Students", students are "courted customers" and consumers in nature, who are not interested in designing their own curriculum but in buying only the tasteful offerings from academic supermarkets. Therefore, curriculum, academic requirements and standards as well as grading and evaluation will all be determined according to the students' tastes and needs. It is the students and not peer professors who evaluate the teachers' ability and effectiveness. (See Table 1)*

The two types of universities mentioned above may seem to be too simplistic. Indeed existing universities are probably somewhere in between these two extreme models. However, it seems to me that a historical movement from traditional higher education based on the faculty dominance over students to a new higher education which is increasingly influenced by the students' needs and tastes has been occurring in Japan as well as in the United States. If we are correct in our assumption that this movement is not temporary, but an inevitable and historical direction of future society, then the most important problem for the universities should be the challenge of how to adapt to these changes while maintaining their identity as traditional centers of learning. I do not believe that all the universities should move in the direction of educational service supermarkets for student consumers. However, if universities cannot attract enough students, it is impossible for them to survive if they only adhere to their traditional identities. Students are the indispensable resources for the university. They are the sources of funds, social prestige, and, everything else, they are the raison-dêtre of the university's mission of higher education. Therefore, it is important for us to consider which aspects of the university should be changed and which should be protected and maintained. Eric Ashby has said that the university "could have been destroyed either by resisting pressures to change and so losing its viability, or by yielding too rapidly to change and so losing its integrity".[10] In an era of increasing social interdependence and rising student consumerism, the survival and development of the modern university is highly dependent upon our finding a good balance between these opposite directions, in short, to provide the possibility for change without sacrificing the integrity of the university.

Table 1. Characteristics of "the University of Teachers" and "the University of Students"

	University of Teachers	University of Students
Value or Goal	Academism (Academic Meritocracy)	Consumerism (Satisfaction of the Consumers' Needs)
Principal Component of the University	Professors (Producer of Learning)	Students (Consumer of Learning)
Identity of the University	Centers of Learning	Centers of Education (Academic Supermarkets)
Major Function	Research	Education
Professors	Researcher (Research Professional)	Teacher (Teaching Professional)
Students	Supplicants for College Admission, Active Producer of Learning	Customers of the University Passive Consumer of Learning
Evaluator	Professors	Students
Principle of Curriculum	Academic Discipline	Market Demands
Academic Freedom	Freedom of Teaching Faculty Autonomy	Freedom of Learning Student Choice
Final Power of Institutional Decision-making	Faculty Conference	Student Power or Influence

* We see the difference in expectations for college students between "the University of Teachers" and "the University of Students" in the following quotation from a campus guide for students of a local private college, which seems to offer a model of "the University of Students".

It doesn't matter if you haven't yet decided
"What should I become?"
It also really doesn't matter if you don't know
"Why I came to the College?"
Because here you have so much time, four years of campus life, enough to think about such problems.

Here it is O.K. if you are still wondering,

"What should I do at college?"

You shouldn't be so self-conscious because you think

"I am already a college student."

Because here is a campus which is always ready to accept you.

– From *Y Private College 1984 Campus Guide*

VI

For the purpose of improving the educational function in Japanese higher education, it seems necessary to re-examine and modify our traditional concept of university education in which special concern with teaching is not considered as important for students because they are supposed to be well enough prepared for higher learning. In concrete terms, the research-oriented attitude of Japanese professors should be shifted more towards student-centered education. Curriculum should be placed into a more central position in the academic organization, and student evaluation of teaching should be introduced into Japanese universities where such practices have hardly ever been carried out. And if academic freedom is to be protected in the university today, the initiative of such reforms should be taken by university professors themselves before the occurance of outside interference. This is the major reason why we have initiated and conducted our research on curriculum and teaching in higher education.

References

1) RIHE-IMHE Project Team: *Japanese Patterns of Institutional Management in Higher Education – A Final Report on the OECD/CERI-IMHE Project*, August 1976, p.56.
   See also, Kazuyuki Kitamura & Yasumasa Tomoda: "Patterns of Decision-Making in Japanese Higher Education", *International Journal of Institutional Management in Higher Education*, May 1977 (Vol. 1, No.1), pp.57-63.
2) RIHE Research Project Team: *The Internationalization of Higher Education – A Final Report*, December 1981, p.99.
   See also, Kazuyuki Kitamura: "The Internationalization" of Higher Education in Japan" *Comparative Approaches to Higher Education – A Report of the Hiroshima/OECD Meeting of Experts*, RIHE, 1983.
3) John Zeugner: "Japan's Noneducation", *New York Times*, June 24, 1983.
4) OECD: *Reviews of National Policies for Education – Japan*, Paris, 1971, p. 57.
5) "Education in Japan: Lessons for America" Article by Edward B. Fiske, *New York Times*, July 10, 1983.
6) RIHE National Survey on University Education among Deans and Professors in Japanese Universities. See, Professor Masao Seki's paper read for the OECD/JAPAN Seminar on Higher Education in January 1984 at Hiroshima University.
7) Kazuyuki Kitamura, "Mass Higher Education", in *Changes in Japanese University – A Comparative Perspective*, edited by William K.Cummings, Ikuo Amano and Kazuyuki Kitamura,

Praeger Publishers, 1979, pp.64-82.

8) "Student Culture and University Education", papers read by Masabumi Tanaka, Yoshihisa Ohmura and Kiyoshi Takeuchi. 35th Annual Meeting of the Society for the Study of Educational Sociology, held on the 23rd October, 1983 at Musashi University, Tokyo.

9) David Riesman: *On Higher Education – The Academic Enterprise in an Era of Rising Student Consumerism*, Jossey-Bass Publishers, 1980, p.421.

10) Eric Ashby: *Technology and the Academics – An Essay on Universities and the Scientific Revolution*, Macmillan, 1958.

CURRICULUM AND TEACHING IN JAPANESE UNIVERSITIES: A REPORT OF RIHE NATIONAL SURVEYS

Masao Seki*, Yuji Matsunaga** and Fumihiro Maruyama**

Introduction

The current condition of Japanese university education can be summarized under the following five relationships; (1) general education and specialized education, (2) students and teachers, (3) teaching and research activities, (4) universities and society, (5) national (or public) universities and private universities.

We have administered the following three national surveys in order to investigate the current condition and reform of curriculum and teaching in Japanese universities, considering the above five relationships.

Survey I[1]: Opinion survey to all faculty deans, which was conducted in 1981 (there are 1165 deans in Japan). 60% were returned.

Survey II: Questionnaire survey to administrative directors of all departments in 1981 (there are also 1165 directors). 65% were returned.

Survey III[2]: Opinion survey to professors of natural sciences and engineering in 1979 (1845 professors). 45% were returned.

In this paper, we shall try to examine the current condition and problems of curriculum and teaching in Japanese universities, based on the three surveys. Here we deal with only two themes; *general and specialized education; students and teachers;* these two themes can provide an important framework in examining the reforms of university education in Japan.

1. General and Specialized Education

One of the reforms in post-war university system in Japan was the establishment of general education. But there exist many problems in it such as ambiguity of its concept and the sequential relationship with specialized education. These problems cause the uniqueness of curriculum and teaching in Japanese universities.

* Professor, Research Institute for Higher Education, Hiroshima University, Hiroshima, Japan
** Research Associate, Research Institute for Higher Education, Hiroshima University, Hiroshima, Japan

(1) Reform issues of university education

After World War II, it became common in universities, especially in national ones, that the first one and a half or two years are devoted to general education and the last two years are for specialized education. The credits for general education consist of 40% of total credits required for graduation. This is similar to the American university system.[3]

During the student movement in the late 1960s, reform of curriculum, especially of general education, was a controversial issue in Japan. The main problems were the lack of sequential relationship between general and specialized education and the atomistic relationship among the subjects of general education.

These were, to some extent, improved after the modification of University Establishment Standards (Appendix I (4) offers detailed information) in 1970: As to the lack of sequential relationship between general and specialized education, one third of the credits for general education were able to be substituted for the basic educational subjects relating to the specialized study field. This assumed that the relationship became mutual between general and specialized education. 64% of the departments* implemented this reform.[4] But only 14% of the departments require upper division students to take general education subjects (Survey II). As to the atomistic relationships among the subjects of general education, new integrated courses or subjects were created. General education used to be clearly divided into humanities, social sciences and natural sciences. But these integrated courses were expected to cover at least two of these three fields. Most departments now provide such integrated courses and 14% of them assign these courses as basic requirements.

Thus, some parts of the general education curriculum were reformed after the period of the student movements. General education, nevertheless, seems problematic. According to Survey III, 69% of the professors think that the important task is reform of general education curriculum and teaching. Half of the faculty deans answer that general education should be drastically reformed (Survey I). Since general education curriculum is related not only to specialized education but also to high school curriculum, only a small change does not make a big improvement for general education.

As for the curriculum of specialized education, the following improvements were made in the 1970s: (1) Specialized courses began to be offered to freshman; 74% of the departments are offering such courses (national universities −56%, private

* Because usage differs from place to place, department, as used in this report, refers to a specialized faculty or school within the whole university system, e.g. school of law.

universities – 89%). (2) Less credits were required for graduation; this was strongly supported by departments of engineering in which required many credits. (3) Enlargement of elective courses; (4) Establishment of common core subjects and interdisciplinary courses. However, specialized education does not seem to have reached a satisfactory level yet. According to Survey III, 83% of professors in natural sciences and engineering think that further curriculum reform of specialized education is an important task. And 77% of faculty deans think that curriculum of specialized education should be constructed not on the basis of individual professor's needs but of the department as a whole.

The curriculum of specialized education should be reformed, considering the relationships among its subjects, society's needs, recurrent education as well as the sequence with general education. Furthermore, curriculum reform should include the transfer system of credits to other department students, other university students, and foreign students. Only 794 students in 84 universities were allowed the credits which they had earned in other universities.[5)]

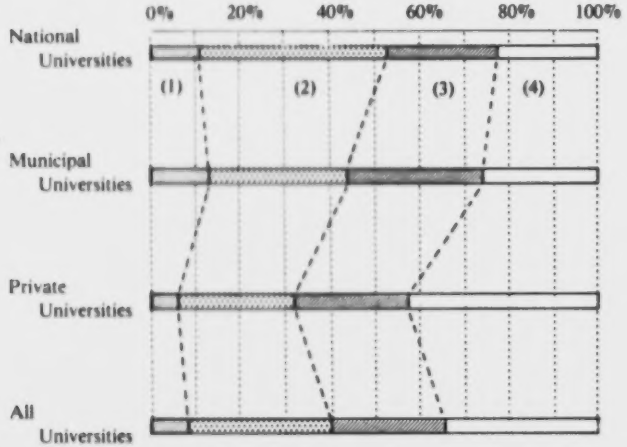
(2) External condition of teaching

The effectiveness of teaching is determined by two conditions: the first condition can be called external, this is the classroom and the other educational facilities, textbooks, student/teacher ratio, the number of students in a class (class size); the second can be called the internal condition, this is the teacher's experience, his or her research career, attitudes toward teaching, and knowledge and ability of teaching. Here we examined the external condition in Japan, focusing on student/teacher ratio and class size. It can be assumed that teaching is most effective under the appropriate student/teacher ratio and class size. The internal condition will be discussed in the next chapter.

As to student/teacher ratio, the number of students per teacher was 16.9 in Japanese universities in 1981. This ratio is almost double the ratio of the United Kingdom (8.8) and West Germany (8.6), almost equal to the ratio in the United States (16.4), and much smaller than the ratio in France (20.4). In Japan, student/teacher ratio varies between national and private universities. The student/teacher ratio in national universities is 8.5 but the ratio in private universities is 27, triple that of national universities. The condition of teaching is very different between these two types of institutions. It is favorable in national universities. By fields of study, the student/teacher ratio in humanities and social sciences is generally higher than in

natural sciences and engineering.

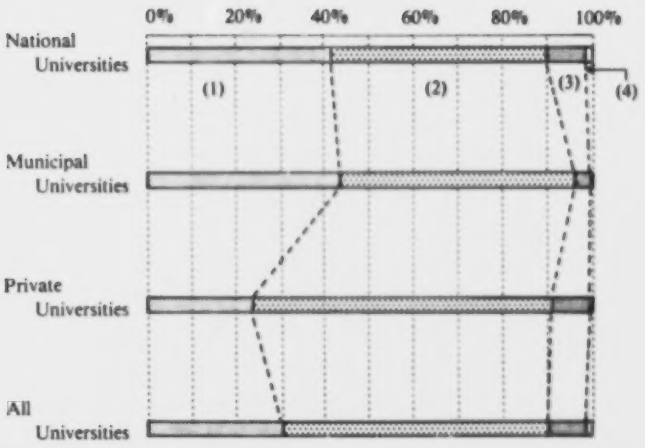
As to class size, we will focus on the lectures and seminars (Survey II). According to the University Establishment Standards, 50 students are suggested as an appropriate number. But Figure 1 shows, 60% of lectures are offered under conditions of more than 50 students in a class. 11% of lectures are given to classes of over 200 students; this is called "mass-production" education. The class size is smaller in national universities than in private universities and it is smaller in small size departments than in large size departments.



Class Size	National (%)	Municipal (%)	Private (%)	All (%)
(1) □ Less than 10	11.2	13.6	6.4	8.5
(2) ▨ 11-50	41.6	30.4	25.9	31.9
(3) ▩ 51-100	24.7	30.5	25.5	25.4
(4) □ More than 101	22.5	25.5	42.2	34.2
(More than 201)	(4.7)	(7.2)	(15.1)	(11.0)

Figure 1. Class Size of Lectures

Although the University Establishment Standard does not refer to the size of seminars, it can be assumed that smaller is better. But as Figure 2 shows, only one third of seminars have less than 10 students in a class. As was also in the case of lectures, the class size of seminars is smaller in national than in private universities and smaller in small size departments than in large size departments.



Class Size	National (%)	Municipal (%)	Private (%)	All (%)
(1) □ Less than 10	41.8	43.7	23.7	30.6
(2) ▨ 11-50	47.8	52.5	66.8	59.8
(3) ▩ 51-100	9.0	3.7	8.5	8.5
(4) □ More than 101	1.4	0.1	1.0	1.1
(More than 201)	(0.3)	(0.1)	(0.1)	(0.2)

Figure 2. Class Size of Seminars

Thus, it can be judged that there are several problems about oversize classes in Japanese universities. But since many teachers want to have a small size class, to use teaching machines and to emphasize graduation thesis and seminars (Survey III), some improvements can be expected in the future.

2. Students and Teachers

The relationship between students and teachers changes as characteristics of students and social functions of university change. If Japanese universities are proceeding toward the *University of Students* as Professor Kitamura mentioned earlier, the relationship between students and teachers would change and it would be reflected in university curriculum and teaching.

(1) Changes in student attitudes

In the age of student movement in late 1960s, students were interested in various

issues in society as well as internal problems of universities. They were generally active in various ways. In the 1970s, universities became stable. But external environments have changed as the energy crisis occurred or economic situation changed. It became difficult for students to get jobs because the job market for students was tight as a result of economic decline. These changes have an effect on students' attitudes and behaviors.

According to Survey I, 75% of all faculty deans agree that learning attitudes of students are generally passive today. And it is also agreed by half of the deans that students generally attend their classes more often than students in the past. There is no difference in student attitudes to learning between national and private universities. According to Survey III, professors point out less learning motivation of today's students and decline in students' achievements. They point out that low achievement subjects are Japanese, English, mathematics, physics and chemistry. Thus, student characteristics are no longer the same as characteristics in the past.

(2) Is the university "student centered" or "teacher centered"?

Teachers may improve their own teaching skills if they notice student changes mentioned above. Our Survey I reveals the current condition of improvement of teaching in Japan. This deals with the internal condition of teaching. 45% of faculty deans consider teaching skills and teaching experience as important criteria when they employ new teachers and decide faculty promotions in their departments. But again, there is a clear difference between national and private universities (29% vs 56%). Deans in private universities are more sensitive to the faculty's teaching ability. 19% of all departments in Japan provide study seminars for improvement of college teaching. Private universities try to manage this task more eagerly than national universities (26% vs 13%). 24% of departments have their own teaching manuals and textbooks. The following activities are not often seen in Japanese departments. Only 2.8% departments provide some instructional training for newly employed teachers. And 0.7% (five departments in private universities) have student evaluation of teaching. 74% of faculty deans respond that curriculum and teaching methods are determined by teachers' concern rather than students' interest.

These data show that Japanese universities, especially national universities, are the very *Universities of Teachers* that Professor Kitamura mentioned, and that teaching has not been significantly improved on the basis of students' interest. Teachers' strong orientation for research may cause the "teacher centered" universities. This is also

confirmed by the fact that 60% faculty deans respond that teachers are more interested in research than teaching.

However, there is still possibility for improvement of teaching in Japan. There are two reasons to support it. First, although department organizations are reluctant to initiate teaching improvements, there are teachers who make an effort in teaching improvement on an individual basis. For example, according to the Dean's Survey I, there are many individual teachers who participate in research meetings or study seminars for teaching improvements. Secondly, many faculty deans want to implement these activities for teaching improvement mentioned above on the department basis. Furthermore, 77% of all faculty deans affirmatively respond that teaching improvement should be made not only on the individual basis but also on the organization basis. And many departments (46%) adopt general education seminars for lower division students as an orientation program for specialized education and research. These are positive aspects for teaching improvement in the future.

Conclusion

Curriculum and teaching methods in Japanese universities were reformed to some extent since the student movement in the late 1960s. As to curriculum reformation, freshmen began to be offered specialized subjects which used to be only for upper division students. As to teaching improvement, general education seminars for lower division students which were considered as reforms from the student side, began to be provided in many universities.

However, Japanese universities, especially national universities, seem to be reluctant to reform curriculum and teaching methods from the student side, compared to American or European universities. For example, few teachers think that they want to implement the faculty evaluation system by students.

There are several reasons for this reluctance to reform. First, there is a strong belief in the concept of the traditional Japanese university. This belief assumes that university is a place for research, and it does not have to pay special attention to teaching methods and curriculum because students are considered to be already prepared and to have research ability. Secondly, there are some regulations such as the University Establishment Standards which limit curriculum construction or reforms. Thirdly, Japanese firms are less likely to expect university education as a vocational training center of students since Japanese firms have better on-the-job training programs. The firms are less interested in what students have learned in universities.

It is important for better teaching to improve both external conditions (student/teacher ratio and class size, etc.) and internal conditions (attitudes of teachers toward teaching, experience of teaching and research career, etc). There are clear differences in external and internal conditions of teaching between national and private universities. Private universities have better internal conditions such as better attitudes to teaching while national universities have better external conditions such as smaller student/teacher ratio. It can be judged that teachers' efforts for better teaching complements poorer external conditions in private universities. On the contrary, better external conditions may hamper teaching reforms at national universities.

Although the number of students is expected to increase in the next seven to eight years as a result of the second baby boom, it will decline after that. It is predicted that the decrease of students affects university teaching and curriculum in various ways. Better teaching in the university will be a sales point for attracting students. The university with better teaching will be able to attract more students. Thus, curriculum and teaching will be more important and will be more emphasized in university education.

References

1) On the Survey I and II, a following report was presented by Yuji Matsunaga and Fumihiro Maruyama: "Current Condition and Future Perspective of Curriculum in Japanese Universities – Report on Questionnaire Survey in Colleges and Universities", *Notes on Higher Education* R.I.H.E., Hiroshima University, No.57, 1983 (in Japanese).
2) Masao Seki and Hirotoshi Yamasaki et al., "The Present Situation and the Prospects of Science and Engineering Education in Japanese Universities", *Note on Higher Education* R.I.H.E., Hiroshima University, No.56, 1983 (in Japanese).
3) Arthur Levine, *Handbook on Undergraduate Curriculum*, Jossey-Bass Publisher, 1981, pp.15-17.
4) This data was taken from the results of a national survey done by Japanese University Accreditation Association: "J.U.A.A-Report" No.7, 1980, pp.21-32.
5) This data was from national survey results included in the book "Towards a More Open Access University - A Progress Report on Innovation and Reform in Japanese Higher Education (HIRAKARETA DAIGAKU E)" by Taijun Saito, Gyosei Publishing Co., 1982.

Appendix I Main Characteristics and Background of Japanese Universities

We would like to summarize the main characteristics and background of Japanese universities. It will be more convenient for you in understanding the contents of this report and the view points of the analysis of our surveys results.

(1) The system and educational contents of Japanese universities changed drastically with the reforms after World – War II as follows. Before World War II, Japanese universities had been institutions for specialized and professional education as in the case of universities in European countries. These universities had accepted only graduates from high schools in the pre-war system which educated them according to a general education like lycées and Gymnasiums but they did not accept graduates from other kinds of schools. With the post-war reform, the qualification for entrance to Japanese universities changed. They opened up to all graduates from upper secondary schools of the new education system which accepts all students graduated from lower secondary schools of compulsory education as in the system of the United States. In addition, general and liberal education, besides specialized and professional educations, came to be stressed in the undergraduate program. This is the reason why we chose "general education and specialized education" as the first viewpoint for the analysis of survey-findings.

(2) The universities in Japan are composed of three kinds of sectors, i.e., national, municipal and private universities. In 1983, the number of universities and colleges (except junior colleges) is as follows: total 458 institutions, national 96, municipal 34, and private 328 institutions. The total number of students is 1,835,000 which breaks down to: national 24%, municipal 3% and private 73%. The total number of full-time teachers is 109,000 which breaks down to: national 46%, municipal 6% and private 48%. Speaking of the number of institutions and students, the ratio of private sector to total is more than 70%. We can choose "national sector and private sector" as dominant ones by considering statistical factors. And so we would like to analyze the findings from the viewpoint of these two sectors, "national and private" instead of all sectors. It will be expected that there are some differences in teacher's opinion on undergraduate education between national and private sectors corresponding to possible differences of social evaluation in these sectors.

(3) Three other viewpoints for analyzing findings are chosen for the following reasons: 1) "Teaching and research activities": This view point is adopted in order to

investigate whether professors respect teaching more than research activities or not.

2) "Students and teachers": This viewpoint is chosen for main reason why we should investigate whether the Japanese university is the "University of Students" or the "University of Teachers".

3) "Universities and society": This viewpoint is selected to clear up whether universities (professors) recognize social needs in order to improve university education or not.

(4) The frameworks of curriculum and teaching in Japanese universities are prescribed by "University Establishment Standards" as a regulation of the Ministry of Education, Science and Culture. According to the regulation, 4 years of undergraduate courses requiring credit for graduation are classified as general education courses (48 credits) and specialized education courses (76 credits). One credit is granted for 45 hours of study. This includes teaching (15 hours in the classroom for one lecture) and student's preparation on the individual basis (30 hours for one lecture class). The general education course is comprised of general education subjects (36 credits), which include three kinds of fields-humanities, natural sciences and social sciences, plus foreign language (8 credits), health and physical education (4 credits) for a total of 48 credits. The specialized education differs from faculty to faculty. The scope of specialized education is prescribed by "Faculty Establishment Standards" as detailed regulations of "U.E.S".

Educational method, i.e. the style of teaching: lecture, seminar and laboratory, the size of class, and the number of books in library, etc., are also prescribed according to minimum standards in the regulations. The regulations would contribute to keep up the levels of undergraduate education in Japanese universities but might prevent the promotion of innovation in undergraduate curriculum in Japanese universities because of restraints from the regulations.

Appendix II

1. **Faculty deans' opinion about university education (%)**

(1) Curriculum and teaching methods tend to be determined by teachers' concern rather than students' interest.

1. Agree	74.0
2. Disagree	9.7
3. Don't know	16.3

(2) Contents of specialized subjects need organizational adjustment, it should not be determined solely by individual teachers.

1. Agree	76.9
2. Disagree	10.2
3. Don't know	12.8

(3) University curriculum should be more responsive to society's needs.

1. Agree	36.7
2. Disagree	29.3
3. Don't know	34.0

(4) Faculty members are generally more interested in their research than teaching.

1. Agree	63.4
2. Disagree	9.9
3. Don't know	26.7

(5) Better researchers are concordant with better teachers in university.

1. Agree	46.0
2. Disagree	15.7
3. Don't know	38.3

(6) Teaching methods should be improved not only by the individual teacher's effort but also by organizational effort.

1. Agree	75.9
2. Disagree	8.5
3. Don't know	15.6

(7) There are few good textbooks in my field of study.

1. Agree	29.1
2. Disagree	56.5
3. Don't know	14.3

(8) Students lack enough knowledge and ability as a basis of specialized education.

1. Agree	48.0

2. Disagree 17.8
3. Don't know 34.2

(9) Present general education should be drastically reformed.

1. Agree 50.9
2. Disagree 18.8
3. Don't know 30.2

(10) Today's students are generally passive in their learning attitudes.

1. Agree 74.8
2. Disagree 16.0
3. Don't know 19.2

(11) Today's students generally attend classes more often than students in the past.

1. Agree 49.2
2. Disagree 17.9
3. Don't know 32.9

(12) Faculty evaluation by students should be used for improvement of university education.

1. Agree 26.3
2. Disagree 36.2
3. Don't know 37.6

(13) Grades are evaluated less strictly by teachers.

1. Agree 32.9
2. Disagree 33.5
3. Don't know 33.5

(14) Regulations of curriculum construction in University Establishment Standard prevent flexible reforms of university.

1. Agree 39.9
2. Disagree 18.9
3. Don't know 41.2

2. **Faculty deans' answer on the teaching condition of their institution (%)**

(1) Your institution provides faculty members the study seminars in order to improve their teaching.

1. Yes 52.3
2. No 47.2

(2) Your institution adopts teaching evaluation system by students.

1. Yes 6.9

2. No 93.2

(3) Your institution provides the guide books and manuals for college teaching.

1. Yes 42.9

2. No 57.2

(4) Your institution considers teaching ability and experience for teacher's promotion and employment.

1. Yes 55.0

2. No 45.0

(5) Your institution gives new teachers a training for effective teaching methods.

1. Yes 7.2

2. No 92.9

Appendix III Main Findings of Survey on Curriculum and Teaching to Administrative Directors of All Departments

Table III-1 Survey of All Administrative Directors

Items		Total	National	Private
1 How many terms in one year?				
	Two semesters	92 %	89 %	94 %
	Three terms	7	10	4
	Other	1	1	2
2 Are open lectures under the auspices of your department recognized as credits?				
	Yes	3	1	4
	No	97	99	96
3 Has your department part time teachers from firms?				
	Yes	87	86	87
	No	13	14	13
4 Does your department recognize some qualifications which your students got outside of the department as credits?				
	Yes	2	1	3
	No	98	99	97
5 Does your department have a mutual exchange system of credits with other universities in Japan?				
	Yes	7	13	2
	No	93	87	98

Table III-2 Survey of Administrative Directors of General Education (Lower Division)

Items		Total	National	Private
1 Are two foreign languages required for students?				
	Yes	72 %	67 %	72 %
	No	16	7	21
	Other	12	26	7
2 Are the integrated subjects requirements?				
	Yes	14	13	15
	No	70	70	71
	Other	16	17	14
3 Are general education seminars offered to lower division students?				
	Yes	46	35	53
	No	54	65	47
4 Are these seminars required subjects?				
	Yes	29	11	35
	No	56	69	52
	Other	15	20	13
5 Are some specialized subjects required for freshmen?				
	Yes	69	40	81
	No	15	32	9
	Other	16	28	10

Table III-3 Survey of Administrative Directors of Specialized Education (Upper Division)

Items		Total	National	Private
1 Are graduate theses required for seniors?				
	Yes	55 %	69 %	43 %
	No	31	18	41
	Other	14	13	16
2 Are some general education subjects required for upper division students?				
	Yes	14	13	17
	No	83	82	82
	Other	3	5	1
3 Are some specialized subjects offered to freshmen?				
	Yes	74	56	89
	No	26	44	11
4 Does your department allow your students to get credit from other departments within your university?				
	Yes	71	81	64
	No	29	19	37
5 Does your department employ graduate students for helping undergraduate students with learning?				
	Yes	4	2	6
	No	80	81	80
	Other	16	17	14

Appendix IV Main Findings of Opinion Survey Among Professors of Natural Sciences and Engineering

Table IV-1 Important Problems for Reforms of Undergraduate Education in the Coming Ten Years*

	Items	Total	National	Private
1	Rethinking of educational goals in undergraduate programs	47.3 %	43.1 %	56.7 %
2	Improvement of curriculum in general education courses	68.9	67.8	72.3
3	Improvement of teaching method in general education courses	40.1	38.1	42.2
4	Improvement of curriculum in specialized education courses	83.4	83.2	85.8
5	Improvement of teaching method in specialized education courses	44.1	44.4	46.8
6	Improvement of credit system and requirements for graduation	46.7	42.9	54.6
7	Planning and implementation for developing teaching abilities of professors	38.0	32.2	47.5
8	Progress of professors' abilities on their researches and learning	72.8	72.6	73.0
9	Complete equipment of educational facilities in universities	60.6	57.3	66.3
10	Reorganization of systems for education and research, e.g., departments	42.9	46.2	36.5

* The rate of "yes" response to total replies is according to whether respondents think the respective problems (items) would be more important in the next ten years or not. The total number of answers is 881 which breaks down to: national universities 541 and private universities 282.

Table IV-2 Important Improvements and Reforms Relating to Student's Needs in Undergraduate Education in the Coming Ten Years*

	Items	Total	National	Private
1	Planning and implementation of programs for students of lower achievement	51.9 %	43.4 %	67.0 %
2	Planning and implementation of programs for students of higher achievement	39.8	34.8	50.7
3	Development of creative and problem-solving abilities of students	85.4	86.9	82.3
4	Improvement of programs for contributing to social needs (e.g., energy crisis)	55.5	54.9	57.8
5	Development of educational and research programs in interdisciplinary fields	66.9	71.7	59.2
6	Improvement of programs considering about the shorter life time of scientific knowledge	28.5	27.7	28.4
7	Cooperation with regional societies around universities	44.6	42.0	47.9
8	Cooperation with industry and companies	48.1	42.9	56.4
9	Opening up of universities for life long education	50.6	51.2	48.6
10	Realization and promotion of the internationalization of universities	69.6	73.0	61.3

* The rate of "yes" response to total replies is according to whether respondents think the respective items would be more important in the next ten years or not. The total number of answers is 881 which breaks down to: national universities 541 and private universities 282.

CURRICULUM AND NEW FORMS OF TEACHING

Theodor Berchem*

The revision of curricula can mean a revision of aims, content, teaching forms and forms of assessment. Present problems of curricula, teaching and learning are caused – at least in the Federal Republic of Germany – by:

- The increasing number of students, which is due to two facts; the high birth-rates of the 1960s and the so-called "opening of the universities" which was started in order to give the chance of a higher education to everybody able and willing to do so. As a consequence many young people have come to the university who didn't have any link to academic or scientific life before. The former function of the university to educate a small élite has thus more or less been changed into the direction of mass education.
- The university laws which determine that universities have not only to give a scientific education to the students but also – if not in the first place – to prepare them for a profession. This task of the universities is not new, but has been strongly accentuated during the last two decades; much more professions than before ask for a scientific preparation or education and a lot of new curricula have been created because of developments in industry and technology.
- The heterogeneity among university beginners, which means that the university teachers are often confronted with students who have a different basic knowledge, and some or even a lot of them don't have the necessary study skills.
- The fact that – at least in Germany – university teachers have never been taught how to teach. Normally they are chosen because of their scientific performance, work and publications; the assumption that a highly qualified researcher will also be a good teacher might have been normal in the former élite university, but it is obviously no longer sufficient for institutions of mass education; this is why since the end of the 1960's new teaching methods are more and more demanded.

---

* President of the West German Rectors Conference

All these facts have led to the recognition that existing curricula have to be rethought, that new ones have to be developed and that in addition to this new and improved forms of teaching and learning have to be elaborated.

Concerning the content of curricula, in short let me deal with three questions of primary importance which dominate the discussion in the Federal Republic and similarly in other European countries, too.

(1) First, there is the question of what is the appropriate structure of the courses of study offered, taking into account the double function of the universities of training a large number of young people for professional work as well as to educate a scientific élite. We shall be able to solve this problem only by pursuing a stronger differentiation in the structure of courses of studies being offered. In doing so, we will have to learn from the model of the Anglo-American universities; for the German universities, which were a model to others for quite some decades, one cannot but state that they have not yet fully drawn the consequences from the dramatic educational expansion that took place during the last decades.

(2) Secondly, we have to cope with the question of which direction we should develop the curricula in substantial terms, taking into account the fact that not only science itself rapidly advances on a path of ever increasing progress – though for the price of an ever growing specialization and separation among the disciplines. Likewise the demands of the occupational system are in a process of continuous change, which is further accentuated by economic crises and structural changes. It is not possible, here, to consider these issues in greater depth. But let me add one remark, as a matter of conviction; the universities would be ill-advised if – under the confusing impression of permanent changes – they were to follow a course of trying to steadily adjust to all developments of specialization and differentiation inherent in the scientific process, or to external constraints. Their long-standing and recognized tradition provides them with the legitimacy to remain conservative in the good sense of the word and to act as guardians of those basic virtues, which have proved their value in the past and will also continue to do so in the future.

(3) The third set of questions finally pertains to the procedures most appropriate to carry the substantial reform of curricula forward. There can't be any reasonable doubt that this is in the first place a matter of the universities themselves, of their departments and, ultimately, of the university teachers involved as part of their academic responsibilities. However, in the Federal Republic of Germany it has become established, as a political maxim, that this alone is not sufficient. Thus, under the federalized

political structure of the Federal Republic which provides for a decentralized jurisdiction in all matters of educational policies, a series of bodies has evolved outside the universities at both the level of the individual federal states (the *Länder*) and at the federal level. Partly based on legislative provisions, these commissions, advisory bodies, etc. are supposed to work out – and to some extent have already done so – recommendations for new curricular structures. In addition to representatives of the state and the universities, their membership includes also representatives of the labor unions and employer associations. But this procedure has in fact not fulfilled all the expectations originally held by the fathers of the strategy. In particular, the readiness to accept these procedures and the results is indeed rather low on the side of the universities and among university teachers, who after all have to eventually transform them into practice. It is, therefore, noteworthy that a governmental commission, set up to review the consequences of the federal "Framework Act for Higher Education", has recommended, just in these days, to eliminate respective legal provisions without substitute.

Let me add a few more remarks in regard to the question of new methods of teaching: Certainly new methods cannot be the same for all curricula, for all sorts of studies, but in any case they should surpass, e.g., the traditional lectures or seminars. One important criterion for improved teaching is the learner-orientated instead of the teacher-orientated method; that means:

1) To include as far as possible the interests and needs of students.
2) To take into consideration previous learning and personal experience of the students.
3) To provide forms of participation in order to motivate students for an active learning.

The main aim of improved teaching is to make the lecture as intelligible as possible to the students. Gregory gave in 1975 a list of suggestions on how this might be achieved of which I may quote some:

" 1) Show concern for the how, the why, and the possible implications, as well as what;
2) Link content to a recent occurrence or discovery, making its recency explicit;
3) Use comparison;
4) Introduce contrasting and, where possible and appropriate, controversial viewpoints;
5) Refer to recent and current literature, and, if relevant, to old literature;
6) Change the student activity, between listening and doing, e.g., by combining expositions with the asking and answering of questions;

7) Challenge students to agree, to disagree, and to suggest their own hypotheses;
8) Put forward a hypothesis which the students themselves are left to argue after the lecture, or discuss at a subsequent discussion group;
9) Pose problems, especially those demanding independent thought, that are not answered in the lecture;
10) Use the blackboard and overhead projector to emphasize key points and diagrams;
11) Periodically indicate that one part of the topic has been completed and another part is being begun."

In addition to an improved lecture as such one can think of introducing more tutorials, of using more distance studies, of reinforcing the interdisciplinarity, and of involving more practitioners in order to make studies more practice-oriented. The whole can be evaluated by lecture evaluation questionnaires, of which the results should help the teacher to adopt his teaching to the needs of the students.

New methods of teaching presuppose the readiness of the teacher to apply those methods and to follow training programmes. Yet the scepticism vis-à-vis these problems from the side of the teachers is still enormous. There are several reasons for this attitude. One reason may be the fact that very often new methods of teaching are proposed or elaborated by colleagues who don't belong to the same discipline or who are sometimes not even faculty members. Another reason may be – at least in Western Germany – that university teachers fear to lose their freedom of teaching, i.e., the self-determination of what and how to teach. Last but not least, we have to admit that there is no real incentive for the teacher to improve his teaching methods; the academic reputation is still based on research work, better teaching doesn't increase personal earning and, due to the still increasing number of student enrollments, universities are not – not yet – obliged to compete for students.

I'm afraid we are only on the way to realizing the need of so-called "Teaching Skills" for university teachers. But I think that in the years to come, the awareness of the importance of these topics will increase and with it the readiness to apply improved methods of teaching to the benefit of the students.

In my opinion, we shall have an increasing number of people with secondary education in my country, according to the development in other countries. We can consider this as a consequence of modern life in highly industrialized and relatively rich societies, i.e., the effect of the need for more qualified work and the wishes of individuals to share the benefits of their societies in terms of their "self-realization", and this includes

education, too. The ways to instruct 5% or 50% in higher education must be different. The big jump in quantity does not correspond to a comparable one in quality and, I am afraid, it never will. Thus, the institutions of higher education have to form the élite and the mass. We can differentiate the level according to different forms of institutions; universities, polytechnics, etc., or by different curricula in the same institution, or both. In any case, we must shorten the first phase of formation because it is impossible to learn in four or five years or even more everything for life. Instead, we have to provide for a good basis and later to offer recurrent education. Life-long learning is the order of our time, and I think that universities have a lot to do in this field. At least in my country, for the time being they have not even really started yet. Let me add a final remark; I am convinced that we must consider the education system as a whole, from the primary level to the different possibilities of higher education, and we must put a halt to the decrease in standards everywhere, and that, eventually, university education and formation will have to repair the failures of secondary education, with the further possible consequence that research academies take over the tasks of the good old-style universities.

《 Appendix 》

BACKGROUND INFORMATION ON HIGHER EDUCATION IN THE FEDERAL REPUBLIC OF GERMANY

The universities and other institutions of higher education in the Federal Republic of Germany have undergone considerable expansion over the last 25 years. The number of students quadrupled in this period, from 290,000 in 1960 to 1.2 million in 1982. With the new generation of those born in the "baby boom" – years of the early 1960's and the continuing expansion of the secondary school system, we may expect a further increase to 1.5 to 1.6 million students by the mid 1980's. Only after 1990 will a gradual reduction begin to take place. The consequences of this increase in the student population are profound, and have been further exacerbated by – in some cases drastic – reductions in government spending on higher education that become necessary as a result of the unfavorable economic situation.

The following is an outline of three problem areas pertaining to our students today:

(1) The declining quality of education resulting from, among other things, the sheer mass of the student population.
(2) The necessity to limit admission to certain courses of study.
(3) The diminishing employment opportunities for university graduates.

1. Declining Quality of Education

At present in the Federal Republic a quarter (the exact figure for 1982 was 26.3%) of all secondary graduates attain qualification for university study. Of these, about 78% actually wish to go on to university study. Since there are few job opportunities for high-school graduates with qualification for university study and only the best may expect to find positions in industry and commerce, more and more will, as before, continue their education at the university.

Expansion in higher education in terms of establishing new universities and increases in staff (of over 300% since 1960) has not kept pace with the quantitative trend just described. Above all, in the face of empty public coffers, higher education has had to accept drastic budget cuts since the mid 1970's:

(1) The University Construction Program planned for the 1980's has lacked the necessary continuity.

(2) A similar trend is becoming apparent in the personnel sector. Conservative estimates predict a deficit in the order of 10,000 teaching and research positions in 1985. Thus, 78,000 staff members in the institutions of higher education will be confronted by 1.5 - 1.6 million students.

The economic measures are often justified with the argument that in the long run demographic trends point to a decrease in the number of students. This argument ignores the fact that the phase of the co-called "student glut" will last for another 15 years. According to the most recent prognosis, at the end of the decade about 30% of all secondary graduates in a given year will earn the right to be admitted to university, given the continuing expansion of the secondary school system. The proportion of students to the total age group may very well rise from today's 18% to approximately 25%. Since today roughly 1.2 million students occupy places intended for 750,000 students, it is apparent that a continuation of the present austerity policy will only exacerbate this overcrowding and preclude any real improvement in the long run. This means that we will have to take medium-term sacrifices in the quality of education of such a nature as cannot be afforded by the younger generation in a period of worsening job-market conditions.

Even now we must register an appreciable decline in the quality of education, not least of all due to the over-proportional increase in numbers of students. Additionally, as a result of the exaggerated reduction of required courses in upper-level classes of secondary schooling, the level of general and specialized knowledge of in-coming new students is often less than what one might hope for. This deficiency is compounded by the present encumbrances in university teaching. In the mass subjects (these are, especially, German and English language and literature, law, medicine and business administration), in the stifling atmosphere of the mass university, it is as difficult for the student to demonstrate his talents as it is for the professor to recognize special gifts. If the present trend continues – budget cuts on the one hand, increasing numbers of students on the other – we must fear an even greater decline in quality in the future.

2. Admissions Limitations

If the German university is to avoid the sacrifices in the quality of education that we fear then we probably have to resort – all other things remaining the same – to an administrative system of total *numerus clausus*, that is to a (computerized) system where literally every first-semester opening and every prospective first-semester student are centrally registered and then matched strictly on the basis of the student's

scholastic performance. Such a system would, however, have grievous consequences in that – putting slightly too sharp a point on it – the insufficient job opportunities outside the university would make a university study appear the only alternative to unemployment for secondary school graduates qualified for study.

The present procedures for limiting admission to overcrowded courses of study are complicated and in some cases differ from state to state (the Federal Republic consists of eleven states, each with broad prerogatives in education) and also from university to university. There is a clear trend towards an increase in admissions limitations. They are involved in all areas of courses of study leading to professional qualification as well as to teacher certification; in the humanities, natural sciences and engineering sciences; at universities and specialized professional schools.

There are different kinds of admissions limitations:

(1) Admission to a subject may be restricted at all universities in the Federal Republic and granted in a centralized distribution procedure.
(2) Admission to a subject may be restricted only at the universities of certain states.
(3) Admission to a subject may be restricted only at certain universities.

In the first case admissions are granted by a central authority, specifically set up for this purpose, the Central Agency for the Allocation of Study Places (ZVS). Here, too, the distribution procedures differ according to discipline.

Procedure A: Applicants are guaranteed admission provided they express no preference as to which university they will attend – their secondary school grade averages and waiting time being of no importance. The centralized distribution serves to evenly utilize capacities at all the universities in the Federal Republic, including the smaller ones and those at less attractive, unpopular locations. Disciplines governed by this procedure are, for example, business administration, law, economics, and information science.

Procedure B: If there are more applicants than openings in a certain discipline, not every applicant can be and waiting time are important in determining who shall be admitted. Disciplines governed by this procedure are agricultural science, architecture, biology, forestry, home economics and nutrition, nutritional chemistry, pharmacy, and psychology.

Procedure C: Special regulations apply to medicine, dentistry and veterinary medicine. Until recently, secondary school grade average and waiting time were decisive for admission, but at present a transitional procedure is in effect. For medicine, a special selection procedure will come into effect in 1986/87; the functioning may be briefly

indicated below. The transitional procedure presently being used is intended to give all applicants, including those with poorer grade averages and shorter waiting times, a real change for admission. The most important features of this procedure are:

a) About 25% of the openings are distributed on the basis of a weighted sum of grade average and test scores.
b) About 40% are distributed by a "performance-oriented lottery", i.e., the grade average influences the probability of admission.
c) About 10% are reserved for applicants with the highest grade averages.
d) About 25% are earmarked for certain groups of applicants, for example foreign students and hardship cases.

The selection procedure to become effective in 1986/87 involves – by a modification of the present quotas – in particular a greater role of the universities in the selection process in that a 15%-quota of study places will be distributed solely on the basis of interviews to be conducted by the universities. This procedure takes into account certain aspects of a – actually more comprehensive – model suggested by the West German Rectors Conference. The new procedure may possibly be extended to encompass veterinary medicine and dentistry, too.

So much for the distribution procedures employed by the ZVS. As already mentioned, individual states and individual universities have enacted additional admissions restrictions. These are in general administered by the states and universities themselves. Only in a few cases does the ZVS do the distributing. Subjects affected by such local admissions limitations are, for example, art history, special education, journalism, ethnology, geology, German language and literature, history, sociology, chemistry and geography. If the trend towards increased admissions limitations, which has been observable for about a year, continues, we may indeed find ourselves confronted with the necessity to introduce a total *numerus clausus* on a Federal level. This is because restrictions in some courses of study have repercussions on other still unrestricted courses of study, and unsuccessful applicants will take recourse to the latter ones. The introduction of *numerus clausus* in the mass subject law, for instance, which is currently being discussed, would result in an overflow into other, closely related subjects and thus precipitate the danger of total *numerus clausus*.

Similar overflow effects are likely not only in disciplines, but also geographically. The discontinuation of certain courses of study at individual universities can lead to an increased influx of applicants at neighboring institutions, likewise will the reduction of capacities in one state of the Republic lead to increased demands at the universities

of other states.

These trends are all the more disturbing since at present insufficient opportunities for professional training outside higher education leave no alternative to university study to the youth of the "baby boom" years.

3. Employment Opportunities

The growing number of graduates from higher education institutions in a deteriorating economic environment raises the problem of adequate employment opportunities in an increasingly restrictive job market . In 1982 we had 83,000 unemployed graduates. This is three times more than in 1974. Of course, the employment opportunities vary depending on a graduate's field of study. In recent years very good prospects have still prevailed for those whose majors were in the engineering sciences or in certain "hard" natural sciences – especially for physicists specialized in electronics, communications technology, nuclear and reactor technology, and for mathematicians specializing in data processing – whereas in some areas of the humanities prospects have been relatively bad, with sometimes twenty applicants competing for each job opening.

The ratios of applicants to job openings in a few important academic disciplines are listed as follows (1982), with certain errors in statistical accuracy to be taken into account.

Engineers, physicists, mathematicians or chemists, pharmaceutical chemists, and medical school graduates 2 : 1

Law graduates 8 : 1

Business administration 6 : 1

Psychologists 5 : 1

Social work 9 : 1

Humanities 20 : 1, (strongly varying according to actual field of study)

Sociology 25 : 1

Teacher candidates who failed to enter the public school system 30 : 1

The civil service, which, heretofore, has offered employment to 60% of the university graduates (including teachers), will in the future be able to absorb at most only about 15%, because in schools and universities, in public administration and in the court system young personnel hired in the early 1970's makes new hiring unnecessary for decades to come. The already unfavorable employment outlook due to the age structure of present employees is exacerbated by the currently hard-pressed financial situation

of the government.

But in industry, too, positions open to university graduates have become scarcer due to automation and the age structure of present employees. It is to be feared that the absorption of university graduates by the private sector of the economy will drop from presently 20% to 14%.

And an overcrowding crisis is being predicted for the independent professions as well. We may expect the number of people in independent professions to at least double until 1990 relative to 1970. Even a quadrupling seems possible if the professions become the overflow basin of the job market. The great numbers of people in the independent professions will in any case have to lower their income expectations, and some may not even be in a position to fully cover their costs of living.

In order to meet the employment needs of university graduates, a number of measures have been suggested:

(1) – Increasing the number of part-time positions
  – Increasing the number of temporary contracts
  – Lowering the retirement age
(2) – Lowering the initial salary level for university graduates in the civil service whose salary scales usually serve as bench marks for salaries in the private economy
(3) – Counseling of prospective students away from teacher – training courses and into technical professions
(4) – Higher education on the broadest possible scholarly basis so as to prepare graduates for professional life in more than one field.

The discrepancy between supply and demand for university graduates already apparent today will surely increase in the middle run. It is difficult to make more than general statements as to long-run developments in the job-market, since such forecasts involve high uncertainty factors.

4. Concluding Comments

The high (and in the future even higher) number of students and the stagnating or decreasing job opportunities commensurate to the education of these students must of necessity lead to a rethinking both of the value of the university career, today's students must be aware of the fact that even good academic performance will not necessarily guarantee a well-paid job to match their educational levels. They must cease to think in terms of being entitled to such positions merely because of their educational achievement and be prepared to accept less prestigious and more modestly

remunerated jobs. This will require a process of rethinking in our country, on the parts of both students and employers.

Present developments in the job market for university graduates must, however, not be politically misused to label all further investment in tertiary education as bad investment. Even if not all university graduates can find employment commensurate with their education, investment in education must always be considered fruitful investment. Investment in education is investment in the future. This must again become the guiding principle of our presently all too shortsighted policy thinking.

UNIVERSITY SUPPORT FOR INDEPENDENT LEARNING – a new development in INSERVICE EDUCATION OF TEACHERS (INSET)

Peter Posch*

1. Introduction

In this paper I refer to INSET but I think that the ideas discussed here are valid also for other kinds of inservice education by universities, and with modifications, also for the initial training of students. In Western Germany, university teachers engaged in the further education of science teachers were asked about the objectives of their courses.[1]

These objectives were given most frequently:

- to present subject matter
- to give opportunities for the exchange of experience

It is interesting that the exchange of experience is second, although it is seldom planned but just occurs. Another observation is interesting: as far as the first objective is concerned the teacher is merely a receiver of knowledge; in terms of the second objective, he devises and controls his own learning - although only during breaks for lunch and coffee.

Doris Knab[2] has analyzed studies on teacher expectations with regard to INSET. For teachers INSET seems to be the more useful:

- the better it allows the individual teacher to discuss matters of daily practical experience.
- the more it produces aids which can immediately be used in practice.
- the more it reduces individual isolation.
- the more it helps teachers to gain distance from the everyday teaching situation, for instance by reimmersion into the academic discipline.

These different, partly contradictory expectations make it sensible to provide different kinds of INSET. Obviously there are passive and active expectations regarding INSET: There is a demand for designs in which the teacher is primarily a receiver of knowledge and for others in which the teacher independently shapes his own further

* Professor, University of Klagenfurt, Austria

education. I shall deal now in more detail with these contrasting approaches because, in my view, they permit not only the categorization of the whole spectrum of INSET but also the evaluation of the strengths and weaknesses of individual INSET designs.

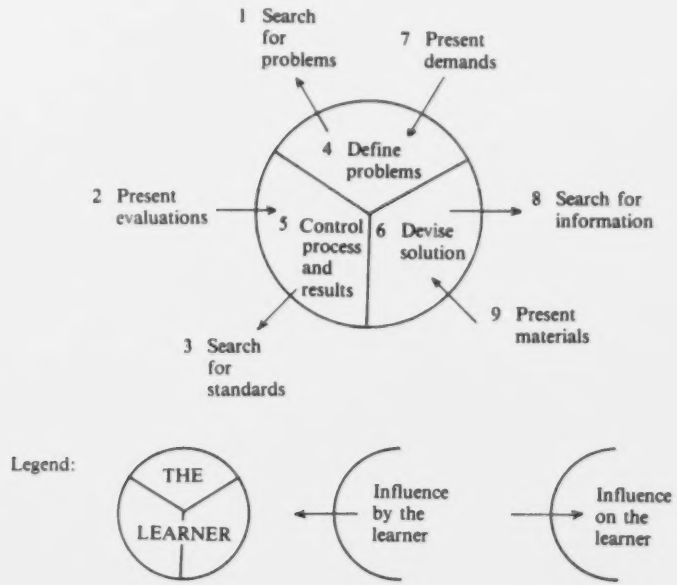
Before I do so, however, I would like to present a simple model to show areas of interaction between the individual learner and his environment during learning.

I believe that any kind of learning implies activities of three kinds:

(a) the development of interests, problems, questions and aims.

(b) work towards their solution or realization.

(c) control of the working process and its results.



The learner takes initiatives to define a problem (e.g., by searching for problems in his professional situation), to solve it (e.g., by looking for information), to evaluate his learning (e.g., by searching for standards). The environment especially the teacher takes initiatives to influence these activities of the learner (e.g., by presentation of demands, content, evaluations). In the above model, the influences of the learner and the teacher are shown by arrows. They imply that direction, intensity and kind of influence determine to a great extent the quality of learning.

Predominantly "autonomous" learning is characterized by the fact that the learner defines his own learning situation; problems, procedures and evaluation. That is, the significant arrows are those pointing towards the environment. Predominantly "dependent" learning is characterized by the definition of the learning situation from "outside", by teachers or the institutions they represent. They define aims and procedures, and make evaluations. In this case, the significant arrows point towards the learner. For each of the three basic activities of the learning process a different relationship between learner-defined and environment-defined influences is possible. The relationship is crucial, however, for the find of learning that ensues.

I would like to use this background to analyze two distinct approaches to INSET which could be considered as opposite poles with an indefinitive number of intermediate designs.

2. The Teacher as Receiver of INSET

In this approach the university or another INSET-institution assumes primary responsibility for the design and realization of INSET. The institution or its representatives decide on aims, content and methods, standards of quality, and organizational conditions. This approach is based on the concept of objectively valid and significant knowledge which is independent of the student and his situation or interests. Teachers are the passive recipients of the knowledge. They can accept or reject the programme but have no personal share in it. They carries out instructions. The programme does not formally give them any freedom to involve themselves with their problems and experiences.

The overwhelming majority of INSET programs correspond to this approach. Generally, they are organized not at a school but at a central or regional institution. The 3 to 5-day INSET seminar in which experts lecture and discuss new developments in the subject field is a good example of this approach. What kind of objectives are associated with it? In the study quoted[3], the following objectives were identified; the presentation of basic knowledge, of new developments and of surveys of a subject area. The undisputed merit of this approach is that it is easily organized and controlled. In this framework, INSET is used to compensate for deficiencies in knowledge and abilities which have occurred due to scientific or scholarly advances, or changes in the legal situation.

Generally the deficits are defined by the institution which represents scientific or technological progress, or which is responsible for the implementation of new legal norms. If such areas of deficit are identified or if new laws define the deficit, a rapid

supply of training programs is possible where the necessary infrastructure exists. At least theoretically, all teachers can be reached. The more centralized the educational system, the more feasible, i.e., administratively functional, this approach seems to be. In relation to the above-mentioned aims, another strength of this approach is that much information can be supplied in a relatively short time and highly qualified experts can be used economically. The more clearly the objectives of a program can be defined and the more they imply knowledge, the higher the potential of this approach probably is. Furthermore, it permits the objectification of the professional career because examinations and entitlements can easily be linked to the program.

What are the weaknesses of this approach? The central problem of this approach is to bridge the gap between the information given and professional action, the latter depending on the experience of the participating teachers and the conditions for the implementation of the acquired knowledge. The teacher receives too much and too little information at the same time because it is likely that the information is not perceived by him to be relevant to his specific situation and the problems which seem important to him.

Here a phenomenon can be observed which – in a medical analogy – is called "tissue resistance" in organ transplantations, because the supplied information may correspond neither to the previous experience of the teacher nor to the situations in which he has to act. The result is that it is difficult for the teacher to translate something from the program into his professional work. Measures to improve the effectiveness of this approach generally operate on two levels:

- The organizers try to get more information on the needs of the teachers. Surveys are made to find out more about the subjective INSET interests of teachers.
- They try to develop INSET designs which are aimed to bring the program closer to the teacher (group work, discussion, role play, etc.).

The distance from the professional situation of the teacher which is characteristic of this approach can be somewhat reduced but it cannot be abolished. If a survey for instance finds a need for motivational aids, this says relatively little about the concrete difficulties of teachers with unwilling students or about the contexts in which the problems arise.

These limitations become very clear if INSET is expected to prepare teachers to contribute to more complex educational objectives, e.g., legally recognized educational aims such as the development of independent judgment and responsibility. Surveys show that employers also place relatively high level demands on the school, e.g., the

creation of the ability to learn independently, to establish and sustain relationships with others, to accept responsibility, to identify and solve problems independently.

For these kinds of demands on the teacher, the approach which I have explained is insufficient in principle. A teacher who is expected to be able to offer his pupils the experience and degree of freedom necessary to the achievement of these aims, must himself experience the conditions in which they can flourish in his initial and further training. These conditions are, however, every difficult to provide within this approach. It needs another approach which I shall describe now.

3. The Teacher as Designer of his own INSET

In this approach teachers take the primary responsibility for his further education. They determine the objectives, content, methods, standards and organizational framework. Here knowledge is seen as a subjective construct of reality, as everyday theory which results from one's activity. This concept sees the teacher as active in shaping his further education and the university takes on the task of supporting him and of facilitating his endeavors. The teachers organize their own learning process, formulating the problems, deciding on strategies to tackle them, and evaluating their progress. Teacher are not only passive receivers of theoretical knowledge but build on their own theoretical and practical abilities.

Such INSET resembles the research process which can be described as the primarily independent realization of the three elements of learning:

- The definition of the problem, its legitimation, and its theoretical analysis.
- The work towards solving it; the necessary studies, experiments, etc.
- The self-evaluation of results, the call for judgements, etc.

The following example of this approach is an INSET program for secondary school teachers. It is organized by the Interuniversity Institute of Distance Education at the University of Klagenfurt.

3.1 The philosophy of the program

The program's philosophy can be described in terms of a number of broad aims:

- The participating teachers should have the opportunity to design their own learning process, i.e., to define the problems, devise strategies of action and to evaluate them. The members of the university should act as facilitators of this process.
- Problem-orientation

The work should concentrate on problems which the individual teacher considers

important and surmountable, i.e., problems for which he already has competencies and strengths and is willing to use them.

- Closeness to the professional situation at school

  The program should develop out of the network of those educational, curricular, social and institutional conditions which shape the everyday life of the teacher, i.e., the starting point should be the situation at school vis-a-vis students, parents, colleagues and the administration.

- Professional communication

  The participant should gain distance from his actions through communication with colleagues and university people and have the opportunity to confront his experience and theory with the experience and knowledge of others.

3.2 The organizational design of the program

The program is organized for teachers of different subjects. For each subject, a team of university people and teachers is responsible. The teams are interdisciplinary; in each team subject matter specialists, curriculum specialists and educationists cooperate. Each team is autonomous with regard to program design but obliged to take seriously the general philosophy of the program. The responsibilities comprise preparation, realization and evaluation of three one-week seminars, the educational and subject-oriented advice to the teachers, and research and development work with the teachers. The duration of the program is three semesters.

Work is done in four places:

- In seminars, of which there are three, each lasting for a week, one per semester. The purpose is the identification and analysis of problems, presentation of teachers' work towards solution of these problems, and presentation of relevant research.
- In regional working groups, which meet between the seminars to exchange experiences and discuss individual work.
- At the individual schools, where the individual participant is engaged in documentation and self-evaluation and institutional experiments.
- At the university where the teams are located, theoretical inputs accompanied by research (e.g., on methods of self-evaluation) are prepared and the program is organized.

3.3 Examples from activities within the program

- The instructional market

Before the first seminar the participants were asked to present a section from their instructional activities at the seminar; the documents should give others some insight into their everyday classroom work, e.g., the documentation of a successful period or set of periods using a description of activities, student work, worksheets, observations, and comments by students. These documents were to be made visible on wall posters. The idea was to place material from the professional experience of participants at the center of the seminar. The team members also participated in this activity. They presented selections on their teaching. This was intended to signal to the participants that a mutual learning process was intended. During the first two hours of the seminar, participants and team members prepared an exhibition for each other with the materials they had brought with them. From this presentation a strong need developed to communicate about the documents, to talk and theorize about the experiences and to discuss quality criteria.

- Analysis of case studies

  The participants were asked to provide short case studies of difficult situations (e.g., on the relationship to a difficult class or to a problem-child). On the basis of such documents the participants analysed the situation by thoughtful questioning of the author of the study. Such analyses were intended to provide experience of the techniques of problem analysis and of the study of the complex field of social relationships in a real situation.

- Presentations of individual work by participants

  From seminar to seminar the participants were increasingly ready and able to report on aspects of their own situation at school, on their teaching methods and the results of self-evaluation or on curricular or subject matter problems.

- The individual work at school primarily consisted of self-evaluation and instructional experimentation.

One of the methods[4] used deserves illustration. Triangulation is a method of self-evaluation by which a teacher uses an observer to collect data on his instruction. It is called triangulation because three data sources are used; the teacher is interviewed, instruction is observed and pupils are interviewed. A mathematics teacher, e.g., who started experimenting with independent student work did a triangulation with the help of a team member, who interviewed the teacher before and after the period. He observed the period and taped one group of pupils at work. After the period he interviewed three pupils on the perceived aims of the teacher and on their own perceived difficulties. Then the data were handed over to the teacher and discussed with him.

The teacher found the comparison of the data stimulating because his evaluation of the period was contrary to that of the students interviewed. For him the independent student work was a flop because the students did not find the correct solutions. The students in contrast reported a positive experience and said that it was the first time they had thought intensively in a mathematics lesson. This again was rather surprising information for the teacher.

These data produced a conflict for the teacher which at first seemed insolvable. It stimulated him to reflect on his assumptions. He expressed the need to talk about these and to repeat the experiment. This is in essence a research attitude. It is not reception of knowledge but production of knowledge for action whereby the teacher controls his learning process.

3.4 Some general experiences with the program

a) We found that an environment which was stimulating in terms of the human atmosphere as well as a wealth of materials from school and university was highly valued by the participants. We also found that in this framework exchange of experience and materials was considered well worthwhile. This increased in the course of the program so that at times the team felt superfluous.

b) We found that the teachers welcomed freedom in shaping their own work but that it was difficult to determine the balance of freedom and guidance. If the room for manoeuvre is too broad teachers have - at least initially - difficulty in using it and gain the impression of a chaotic situation. If the freedom is too limited the teachers take a passive role and the gulf between the assumptions underlying their everyday practice and the seminar experience reopens.

c) We found that a sincere respect for individual participants and their theoretical assumptions is essential to allow them to seriously consider alternative theories and practices.

   We also found that mutual confidence and trust are equally important. In this respect the length and continuity of the program was a considerable advantage because it takes time to build confidence. There is ample evidence that confidence opened the door for some teachers to talk about serious problems and even personal difficulties and weaknesses. On the other hand, the development of trust in time resulted in an increased tendency not to disturb the positive atmosphere by a discussion of critical questions.

d) At the beginning of the program there was deep reluctance and even anxiety to report

on the individual situation at school. The teachers did not consider their own experience worth communicating. The gradual increase of self-confidence and of the ability to talk about individual experience and theoretical reflections was considered one of the most valuable experiences.

3.5 The role of the university

For the university the program was unknown territory in many respects.

a) The teams were interdisciplinary, consisting of subject matter specialists, curriculum experts, educationists and teachers. They were permanently forced to find a common language and to cooperate. This proved to be a difficult endeavor. In the view of the team members, it provided one of the most valuable learning experiences for them.

b) Another unusual feature was the role which the team members had to play. They were not supposed to play the expert but rather to present themselves to the teachers with their own educational and curricular experiences and problems. Thus the team lost the elevated position which a university representative normally assumes vis-a-vis a student of further education. Many participants stressed that it was an important experience for them to find that university people are not essentially different, that they have similar problems and even similar difficulty in transforming theoretical knowledge into sensible action.

c) It was also important for the team to experience the disjunction between theoretical knowledge and the conditions for action. The complexity of the context of action was found to be considerably greater than the complexity of the theoretical assumptions which were used to facilitate action.

d) For the team members the program was associated with a number of incentives for educational, curricular and subject matter research. Several research problems were developed, e.g., research into the concept of number, into the reception of literary texts, and into class climate.

e) The program has already had some consequences for the regular teacher training program of the university. Students were included in research and development processes which accompanied the program; teacher-produced documents on instructions were introduced into ordinary coursework.

4. Conclusion

At the beginning of my paper I mentioned that I believe that the ideas discussed

here are valid also for other kinds of inservice education and, with modifications, even for the initial training of students. I leave it to you to judge the feasibility of this thesis. Personally I am convinced that the economic crisis with its effects on youth redundancy and on the decreasing resources available to the university should be a serious stimulus to find strategies by which the student can gain the independence, self-confidence and competence to cope with increasing insecurity.

Reference

1) Block, H. Ann u.a.: Institutionalisierte Lehrerfortbildung im naturwissenschaftlichen Bereich – Auszüge aus einer Studie zur Lehrerfortbildung in der Bundesrepublik Deutschland. In: *Unterrichtswissenschaft* 1981 (1), pp.15-33.
2) Knab, Doris: Der Lehrer muß dran glauben – Was bedeutet Wirksamkeit von Lehrerfortbildung? In: betrifft: *Erziehung*, März 1981, pp.24-27.
3) Block, 1981, p.28.
4) Elliott, John: Action Research: *A Framework for Self-Evaluation in Schools*. Cambridge (Cambridge Institute of Education) 1982.

CONCLUDING REMARKS FOR THE HIROSHIMA SESSION

Keith Clayton*

First I should like to thank the organisers of the Symposium for asking me to chair a session, and the Department of Education and Science for selecting me as one of the two British delegates and finding my fare to Japan. With all other members of the symposium I have greatly appreciated the "culture shock" of Japan, and am most grateful for the very kind hospitality of our Japanese hosts. It is a most enjoyable occasion, and I look forward to the remaining days in Tokyo.

I have been asked by George Papadopoulos to summarise, so far as practicable, the Hiroshima Sessions today. My task is made easier by the summary and commentary on the reports of the Japanese enquiry presented by Lennart Levin this morning. In some ways my task might also be regarded as superfluous, for it has almost all been said most elegantly and succinctly by A.H. Halsey in a six page paper included in the Reports of the earlier Hiroshima/OECD meetings of experts distributed to us on arrival. In "Who owns the university curriculum", Halsey traces the history of the university in society, and notes the essential and continuing tension between teaching and research. Today we have had an emphasis on teaching, and after reviewing what has been said, I hope I may be allowed to go on to say a little about the place of research in a university. I think it may sharpen up some of the problems we have been facing today as we have reviewed Japanese, German and Austrian examples.

Since Lennart Levin's summary and discussion is in the record, I need not say much more about the Japanese studies, although we note that Halsey's tension is well to the fore. The teachers largely think of themselves as researchers, and to some extent this allows them to use the need for research as an excuse to pay less attention to their teaching than some, at least, of the students would prefer. Yet would it be right to press so hard for better teaching that time is no longer left for the research role of the university? It seems that in some institutions this might not really matter; they are effectively teaching institutions alone, so the task might as well be done properly. But for the Daigaku, This is not such a simple choice.

---

* Professor of environment sciences, University of East Anglia

Both in the papers we have heard today, and in the history of higher education in the various countries represented here, there is a remarkable convergence. Many people have suggested that we should attempt to improve the acceptability to students of what we teach, especially by trying to improve the way in which we teach. Lennart Levin described the work in Sweden in 1965. In the UK we had the Hale Report in 1964 which encouraged the training of university teachers, and a further enquiry under Brynmor Jones in 1972. Germany has been discussing the issue, but it is not yet the concern of a central enquiry; in Japan the situation revealed by the Hiroshima enquiry is surely likely to lead to some sort of central activity by 1985 or so.

As we have heard, it is still the case that remarkably few teachers in Higher Education are taught to teach. Ernest Boyer went so far as to suggest that the students have given up learning because the teachers have given up teaching. I am not so sure that this is the complete explanation. I have observed that not only do we not teach our university staff to teach, we spend precious little time teaching our students to learn. When that is done (and I use an Open University module with my own first year tutorial group), there is certainly an improvement. We expect students to work by themselves, but they are rarely properly prepared for this in school, and a little help can be effective. But beyond this technical point, I also detect a considerable change in the social group, in that hard work and academic success are regarded as odd, almost antisocial, and the group encourages a pattern of underachievement. To merely get by, when with effort you would shine, seems to be the way to win friends and influence your student colleagues these days. I wonder if similar social patterns have been detected in other countries?

Halsey's question, "Who owns the curriculum" has been addressed today in terms of teachers or students. But I also detect another influence, for at times the curriculum is controlled in quite a detailed way by the centre – it is then not really open to the teacher to modify it much at all. In the United Kingdom part of the nature of a university is freedom to produce a curriculum at the local level of the department, or even at times the individual teacher. Where this freedom is fettered, as in the case of the professional requirements of subjects such as law, engineering or medicine, something of the academic freedom of the true university is necessarily lost. I am not convinced that central control over much more than the total length of university courses serves any useful purpose.

Who can improve the teaching? In higher education, educationalists are never recognised as peers – how could they be when our skill is in handling material at the

limits of knowledge in our own subject. As Halsey says, "professors conspire against education". The professional educator can teach simple skills like facing the class, or writing on the blackboard in letters large enough to be read at the back, and goodness knows, some of us need even that level of instruction. But the real skill of imparting understanding of a complex subject at the limits of human understanding of that subject matter has to be left to the specialist. Mr. Posch has indicated one way ahead, a style of independent learning, self-guided and in the end self-taught. His approach reminds me of the story told of the Harvard student who performed better than all his colleagues in a remedial reading class. His tutors turned with pleasurable anticipation to his report on the course which all students were asked to complete – here surely would be the accolade they deserved. They were rebuffed, for he wrote, "This is the worst course I have ever had to attend. Any progress I have been able to make has been entirely the result of my own efforts". As Posch so succinctly put it, the danger is that we make a centre of teaching out of a centre of learning.

So I wonder at our emphasis today – have we had too much about teaching and too little about learning, too little about students? Professor Kitamura went so far as to assert that students are the indispensable resources for the university – I am far from sure about that, and for a time at least, it is possible to have good universities (and certainly good departments) without any students at all. I have also noticed remarkably little comment on the differences between subject – indeed the arts/science contrast was first mentioned by Mr. Levin in the morning session. In the UK, many of my arts colleagues have reacted to declining resources by neglecting their research in order to sustain the amount, and thus what they see as the quality, of their teaching. Scientists have conversely often been ruthless in trimming options and increasing class sizes to maintain the time and the resources to continue with research. These seem to be deep social differences within academe.

Perhaps it is because I am a scientist, but I am concerned that we have had so little about research – except in the rather negative way that it seems to be what gets in the way of Japanese professors taking their teaching seriously. I think Leslie Wagner put his finger on it in a comment earlier today when he commented on the unthinking expansion of institutions of higher education. It is one thing to want to provide higher education to a much larger proportion of the population – indeed that is an admirable thing to do. But is it best done by more of the same, by cloning universities until the demand is met? I think not, for neither the students nor the staff are necessarily best served by pretending they are in a research based institution, while no government seems

prepared to pick up the bill. As a result, it is assumed that the high cost of education must be due to "all this research", so staff-student ratios are squeezed, and research threatened, not only where it is second rate, but also where it is irreplaceable. it is of course difficult to square such an élitist view with our social conscience – witness the German agonies over *numerus clausus* – but if the true role of the university is to survive alongside the teaching of a large proportion of the age group, it is essential.

So, anticipating our discussions at Tokyo, I come up with a scenario for a divided higher education, with universities and non-universities, these latter called colleges, polytechnics, institutes of higher education or whatever you like, but best not called universities. This view of the essential nature of the university as a research-based institution has been echoed by Halsey in the paper I have already referred to. He writes, "The university will always have a curriculum of its own, the curriculum of the research frontier", and he goes on to emphasise the role of the university as a standard setter. How important this is: if we do not have universities to show just what may be achieved at the highest level academically, who else is there to do it? And once the standards are lost, once the currency of academia is devalued, it is a long job to re-establish quality again.

Putting research and the maintenance of standards at the head of our agenda throws doubt on some of the solutions advanced in the past few days. The American view that competition will do the trick, that students will seek out the "best" institutions with the highest quality teaching, so that such places will flourish, seems unlikely to me. When students are short, there are great dangers in counting the warm bodies across the threshold as the basis of funding decisions. It is at least as likely that standards will be lowered as a result of such competition as that they will rise. Will better teaching always win over easier courses and simpler exams? There is also the interesting contrast that in most countries the student group seems to be falling, and with it the finance available, while in a few (including Ireland and Japan for example) the problem is burgeoning demand. Surely it is a crazy world if too few students gives rise to one type of university, and too many to quite another! Somehow we need structures which recognise the place of universities as standard setters and ensure that, within the limits of funding which society will accept, some institutions at least are kept on that pedestal.

One of the weaknesses in current debates about what society can afford in this area is that too much weight has been placed on the time-honoured link between teaching and research. There is a case along these lines, but it is not so compelling that it will

persuade a reluctant government, or any other clientele, that universities deserve funds to carry out research. In addition, Halsey's comment on the tension between these throws doubt on the idea, while (sadly) many university subjects no longer manage to reach the research frontier with the first degree. I sometimes wonder if this is right – is it not possible to develop concepts and curricula to the point where that frontier can be reached in all subjects? But however that may be, there are to me far stronger, and for government far more compelling, arguments for ensuring that the true university is a research-based institution.

The main argument is that the arrangement is remarkably economical. The common government view of universities identifies their role of teaching school-leavers and so they pay attention to their teaching costs. That in many cases these are remarkably low – for example the cost *per graduate* in the United Kingdom universities which reflects the short course length and the low wastage rate – does not stop government trying to drive them down still further. Yet the same attention is rarely paid to research – that is a by-product, much as wool comes from a sheep raised to produce mutton. My own enquiries suggest that in Britain the cost of maintaining an active researcher in a particular subject in a university is much the same as that in a specialised research institute. So if we look at the cost of university research, it is no more expensive than elsewhere. What no one seems to do is to put these two observations together. In other words, to divide the total costs of universities by the number of active researchers, and then in another place to divide the total costs by the number of students, is utter nonsense. What we must appreciate is that these two activities go on side by side with the same inputs, and that when these inputs are apportioned properly, both activities are remarkably cost-effective. I suspect that no institution which does not do research can ever teach quite as cheaply as one which does, while no research institution which does not teach can manage to carry on its research as cheaply as a university.

Perhaps I should illustrate this by a single example. There have recently been estimates of the costs of teaching computing and maths in British Polytechnics, and this seems to cost almost twice as much as the same activity in universities. I strongly suspect that the reason is that a big university computer spends about 85% of its time number crunching for research, running an efficient teaching service on the remaining 15% or so. The Polytechnic computer may not be quite as big, but it uses at most 15% of its capacity for research, so the remaining 85% carried on the teaching service represents a high cost. It is underutilised because the mix of demands on it is an inefficient one.

Beyond these arguments about economic efficiency, there remain the academic ones linking teaching and research. Here I would still depart from the traditional view, for it seems to me that the presence of students provides both a stimulus and a safety valve for older researchers. There can be few academics, particularly these days when research students are thinner on the ground, who would not gladly take on an additional PhD student. Their ability to get on with research, to assist with teaching, and to act as a sounding board for research ideas is a combination of great power. I have seen all too many wild theories escalate beyond the bounds of reason in researchers in research institutes; this is a rare event in university teachers, for such ideas are quickly torn to shreds in seminars and colloquial.

So I am left with the view that we must keep the role of research paramount in our concept of the university. This does not mean that we should not teach well, nor as I have suggested that we need be unduly expensive. And expansion should be limited, not simply by the ability to pay (for properly assessed, teaching in institutes of higher education is likely to be more expensive than in universities, not less), but should be limited by the ability to do worthwhile research. The economies of scale do not apply if that research which goes on alongside the teaching is of little value, nor indeed if that teaching which goes on alongside the research is ineffective. And that brings us back to the emphasis of today's discussions.

We must accept that it often will be an uphill struggle arguing for the proper place of universities, and for adequate funding. As Halsey put it, "Most people cannot bear universities - it is a very specialised taste". And perhaps I can suggest a partial reconciliation from Eric Ashby, as quoted today by Professor Kitamura; the university "could have been destroyed either by resisting pressures to change and so losing its viability, or by yielding too rapidly to change and so losing its integrity". We must preserve what is best and cautiously allow adaption to the pressing demands of society. But we must also be sure just what is about our universities that matters, and society is not always inclined to give us time to sort that out.

PART II

DIFFERENTIATION AND INNOVATION

UNIVERSITIES AND NON-UNIVERSITY HIGHER EDUCATION IN JAPAN

Taijun Saito*

Higher education institutions in Japan fall into four major categories. In the following sections, prominent features of those four categories as well as differences and inter-supplementary functions of the institutions under mass higher education are overviewed to present some current topics for discussion.

1. Higher Education Institutions in Japan – Four Categories–

(1) "Daigaku" (Universities and Colleges) (455 in number)

After the Seconds World War, almost all the higher education institutions established by the prewar system including teacher training colleges were reorganized as "Daigaku" constituted of four-year courses. In spite of their legal status as "Daigaku", some of them confer only the first degree. Institutions with post-graduate courses, which are entitled to confer doctorate degrees and could be called "universities" in the strict sense of the word count not more than half of the total number of the institutions of this category.

All "Daigaku", whether or not entitled to confer master or doctorate degree, enjoy intramural autonomy of the faculty, and are inclined to develop their research function in addition to their teaching function.

Table 1. Number of Universities/Colleges and Faculties (1982)

	Total	Up to the 1st deg.	Up to master deg.	Up to doctoral deg.
Total	455 (1,017)	190 (360)	88 (228)	177 (429)
National	95 (339)	16 (77)	38 (129)	41 (133)
Municipal & Prefectural	34 (67)	12 (27)	7 (10)	15 (30)
Private	326 (611)	162 (256)	43 (89)	121 (266)

Note: Numbers of faculties are in ( ).

* Deputy Director-General Higher Education Bureau, Ministry of Education, Science and Culture, Japan

(2) Junior Colleges (526 in number)

Junior Colleges constituted of two- to three-year courses, most of which, however, are two year long, are established to provide vocational/professional education as well as practical education for daily life. Organization of Junior Colleges such as qualification of academic staffs, curriculum, faculty meeting, etc., tends to follow those of traditional universities.

In reality, however, the bulk of those Junior Colleges are run privately and devote themselves largely to general education for women in such courses as humanities, social sciences, home economics, etc. They do not necessarily have inclination towards research function.

Table 2. Number of Junior Colleges and Entrants Thereto (1982)

(For the comparison)

		Entrants to Junior Colleges (× 1000)			Entrants to Universities & Colleges (× 1000)		
	Number	Total	Male	Female	Total	Male	Female
		(100%)	(9%)	(91%)	(100%)	(77%)	(23%)
Total	526	179	16	164	415	317	97
National	36	5	3	2	86	66	20
Municipal & Prefectural	51	9	2	7	11	7	4
Private	439	165	11	154	317	244	73

(3) Technical Colleges (62 in number)

Technical Colleges are established for practical and professional education in the field of industry and mercantile marine. Courses of those Technical Colleges are five-year long, the first three years of which corresponds to upper-secondary level in the whole educational system, and the rest two years of which are of higher level. This means that the standard age of graduation (20 years old) is the same as that of junior Colleges mentioned in the previous section.

It is argued that Technical Colleges are characterized by their industry-oriented nature; staff exchange with industrial world, emphasis on practical experiment and training in the curriculum, etc., and graduates of Technical Colleges are highly evaluated by the business world at large. This sector is not large enough in terms of raising questions to the overall strategy for the whole system of higher education, albeit they are considered unique higher education institutions in comparison with traditional

universities and colleges which are seeking for academic excellence.

In 1982 there were 62 Technical Colleges (54 national, 4 municipal or prefectural and 4 private) and 9,800 entrants.

(4) "Senshu-gakko" (New Type Colleges) (2,285 in number)

"Senshu-gakko" are offering highly vocational and/or professional education as well as practical/cultural education for daily life. The length of the courses of which is more than one year, and most of them are two-year long. Since the regulations on the curriculum and teachers' qualifications are stipulated much less strictly than those of the other sectors of high education institutions, and there is no legal regulation on the autonomy of faculty meetings, they are able to provide a variety of educational services with social relevance, responding quickly to changing social needs and developments.

Although it is said that "Senshu-gakko" at large tend to have such shortcomings as possibility of occasional profit-making management, instability and comparatively short longevity of small schools and maldistribution in favor of urban districts, it seems reasonable enough to argue that those New Type Colleges are effectively meeting vocational/professional and cultural needs of the general public, providing educational services to obtain technical skills and/or qualifications as well as offering specialized and, at the same time, flexible courses according to the aspiration and aptitude of each student. This sector is growing rapidly corresponding with recent changes in industry, employment structure and society at large, and is, as it were, raising discussion on strategy for the whole higher education system.

Table 3. Number of Senshu-gakko and Enrolments Thereof
(Only of those requiring qualifications and completion of upper-secondary level)

	Number of Schools	Enrolments (× 1000)	Entrants in 1982 (× 1000)
Total	2,285	362	201
National	168	16	–
Municipal & Prefectural	142	20	–
Private	1,975	326	–

2. Difference in Institutions Related to Higher Education

(1) Differences in the Institutions

Differences among various institutions related to higher education are described as follows:

	Daigaku	Junior Colleges	Technical Colleges	Senshu-gakko
Regulation on curriculum (Courses and subjects are stipulated by official regulations)	+ +	+	+	−
Qualification on academic staffs (Emphasis is put on academic/educational career)	+ +	+	±	−
Faculty meeting (Autonomy is recognized)	+	+	−	−
Governmental subsidies (Subsidies are provided to private institutions)	+	+	+	±
Transfer to students (Inter-transfer of students is possible)	+	+	+	−
Transfer to credits (Inter-transfer of credits is possible)	+	+	−	−
Credential (Official degrees and credentials are conferred)	+ +	+	+	±

1st, Master or Doctorate degree

Graduation qualification are evaluated in working life

Ditto

Graduation qualification are not necessarily recognized in working life

As specified above, in the case of "Daigaku", curriculum, academic staffs, qualifications, faculty meetings, etc. are officially regulated, and system of governmental subsidies and official degrees are institutionally established, i.e., the foundation of establishment and quality of education as educational institutions are firmly assured by the governmental support. Almost the same thing can be said in terms of Junior colleges, however, "Senshu-gakko" scarcely enjoy such governmental support.

(2) Problems with the systems – the other side of the coin –

Governmental supports assured by various systems, which seems favorable for the institutions, could work as drawbacks, and such a different evaluation as follows could be made in terms of practical operation of the system:

	Daigaku	Junior Colleges	Technical Colleges	Senshu-gakko
Regulation on curriculum (Non-existence of regulations for general education. Adjustment to aspiration/aptitude of students and to socio/industrial needs is possible)	−	±	+	+ +
Qualification on academic staffs (Talent from various sectors in the society at large can be mobilized)	−	±	+	+ +
Faculty meeting (Smooth adjust-ment to social changes without hindrance by conservative and/or self-preservative attitude of facul-ty staffs)	−	−	+	+ +
Governmental Subsidies (Due to scarecity subsidies, managerial ef-fort is made on the side of all staffs within the institutions in pursuit of social relevance)	−	−	−	+ +
Credential (More effort is made to provide more practical and realistic educational services due to less social recognition of the diplomas)	−	±	±	+ +

3. Higher Education at Mass Level – Conclusion –

(1) Arguments in the preceding sections, which dealt with the institutional differences among various sectors of higher education and with the controversial points thereof, could hardly bring a clean-cut conclusion that which type of higher education institutions would have the most importance in the coming decades. It should be said that each institutions have their own particularity.

(2) Special emphasis should be put on the academic freedom in "Daigaku" which

are carrying out basic research functions for the sake of pure/applied sciences as well as education/training of essential human resources. Traditional institutional security for the "Daigaku" should be highly respected in order to maintain their independent development, avoiding imprudent and shortsighted accommodation to minor social changes and/or demands.

(3) Great importance, however, should be attached to non-university higher education institutions in a mass higher education system. In particular, "Senshu-gakko", which have been accomplishing a prominent development, have been unduly considered and treated as exceptional higher education institution should have due place in the whole system. In a country where no less than 35% of each generation of contemporaries receives higher education, it is crucial to provide a large variety of higher education opportunities by various institution including "Senshu-gakko" through maintaining and developing of their own characteristics.

(4) Traditional universities on the other hand, should make more endeavors to their management on their own side without losing their characteristics as universities following examples of the bulk of the Senshu-gakko, which are always struggling to survive by adjusting themselves to the changing social needs.

DIFFERENTIATION WITHIN A UNITARY HIGHER EDUCATION SYSTEM – SOME EXPERIENCES OF THE SWEDISH MODEL

Ulla Åhgren-Lange*

1. The 1977 Higher Education Reform in Sweden

According to the Swedish Higher Education Act of 1977 all post-secondary education in the country forms a unitary system. This integrated higher education system is, with some exceptions, under the supervision of a common central agency, the National Board of Universities and Colleges (NBUC), under the Ministry of Education and Cultural Affairs. One exception is education within the agricultural field: there is a University of Agricultural Sciences directly under the Ministry of Agriculture. Other exceptions are the Stockholm School of Business Administration and a couple of other private schools which form the small sector of private higher education institutions in Sweden. All the others are public institutions.

Since 1977 then, Sweden has a single, integrated higher education system, and not as in e.g. the United Kingdom, a binary system. Before 1977 the situation was different. The teacher training colleges and the colleges for training of nurses and various kinds of medical and health care assistants – the paramedical professions – were under the supervision of the National Board of Education. The schools of social work and public administration had their own central agency under the Ministry of Education, and so had the schools of journalism. The schools of art, of music and of performing arts were separate units. The institutes of technology had, however, been part of the university system since 1964.

The philosophy behind the 1977 reform was not entirely new. We had in Sweden during the 1970's gradually opened several university educations to adult students without traditional qualifications. The admission rules at the teacher training colleges, the schools for training of nurses and the schools of social work were by tradition favourable to adult students, often with experience from the fields concerned. Also, there had been a reform at the upper secondary school level in the beginning of the 1970's. Then a unitary and integrated upper secondary education was introduced, with three or four

* Adviser to the Chancellor, National Board of Universities and Colleges, Stockholm, Sweden

year programmes in the traditional way but also two year so-called theoretical programmes and two year vocational programmes. Though it is not formally compulsory almost everybody in school continues to upper secondary education. It is very difficult to get a job without it, as competition in the labour market has got harder and we have a peak of young people in the age group 16-20 years old.

Many ideas behind the 1977 higher education reform were similar to the ideas behind the upper secondary education reform, e.g. the wish to equalize differences in status between different kinds of education, to increase accessibility of education and bring about more social justice. The social justice point of view was very much the reason for introducing common admission rules for all higher education, favouring adults with work experience. As in the case of upper secondary education there were also arguments that a unitary system would facilitate planning and coordination and transfers from one education to another.

There were, however, a set of ideas that were specific for the higher education reform. One of them concerns the goal of higher education. 1977 it was decided that all higher education shall include elements of vocational training and prepare the students for the labour market. This point was made clear by dividing undergraduate training into five vocational study programme sectors as regards planning and the allocation of resources. The sectors are:

Sector 1 Education for Technical Professions

Sector 2 Education for Administrative, Economic and Social Work Professions

Sector 3 Education for Medical and Para-medical Professions

Sector 4 Education for Teaching Professions

Sector 5 Education for Information, Communication and Cultural Professions

Closely related to vocational training goal was the idea of regional planning of higher education. Six regional boards were established with the responsibility to facilitate adaption to regional educational needs, particularly by means of short courses and local study programmes.

Another important feature of the reform was the widened participation in and influence on planning and decision-making. Around 1968 students and university employees demanded in Sweden, as in many other countries, greater participation in decision-making on university affairs and also got it, formally on a temporary basis, as experiments. During the 1970's other groups in society, particularly the unions, meant that they also had reason to be included in the decision-making process in the universities. And there was an opinion that society as a whole should be more involved in

decisions concerning higher education. Since 1977 politicians and other representatives of central interests in society outside the universities have a strong position in all local boards for study programmes, in the university and college boards, in the regional boards and in the governing board of the NBUC.

A strong argument for the unitary higher education system was also the opportunities to establish close contacts between undergraduate education and research and graduate education within a common framework. "Research relatedness" for all kinds of undergraduate education was supposed to give the "new" college educations a higher quality – more of theoretical and methodological perspectives and better information about recent research findings. And it was also believed to bring in problems from various parts of working life into the researchers' minds, most fruitfully maybe in the case of professionals now being able to start a doctoral education and perhaps pursue a career as a researcher.

2. Various Forms of Differentation within the Unitary System

Even if we formally have a unitary higher education system in Sweden there are important differences between its parts.

Despite the efforts to integrate all post-secondary education and promote "research relatedness" there is a structural distinction between undergraduate education and graduate education. There are separate boards and separate funds for research and graduate education. Furthermore, professorships and other permanent research allocations exist, and are allowed to exist, only in seven places in Sweden, at the six former university towns and at Luleå where there is a University of Technology. This restriction was made to avoid scattering out research support and to keep Swedish university research at a high level. The result was, though, that most of the new colleges, often "upgraded" teacher training colleges, have difficulties to establish the intended "research relatedness."

Another border line is the one between state higher education and higher education run by the county councils or the municipalities. Education for paramedical professions is almost exclusively run by the county councils, which is natural in Sweden as the health care system is the responsibility of the county councils. It means, however, that the education is also subordinated to the laws and regulations within that field. Further, such institutions are not allowed to have permanent research allocations. Only state higher education institutes have that privilege, and, as said above, only very few of them.

Also, the schools of art, music and performing arts still have their own admission rules, which make them a special part of the higher education system.

More important, however, than formal border lines are the different traditions that various educations have, and the educational level of the faculty. In the "new" educations brought into the higher education system in 1977 very few teachers, if any, have a Ph D, whereas in the traditional university educations most of them have. Of course that means great differences as to the possibilities to introduce new research findings in the undergraduate education and to bring in theoretical and methodological aspects.

There is not, however, a difference of the costs of higher education to the disadvantage of the "new" higher education programmes. The programmes for teacher training and in fine arts are generally more expensive than the programmes for some traditional academic professions.

Study Programmes	Cost per Capita and Year 1981/82	
	Sw crowns	US dollars
School teachers, grade 1-3	28,900	3,600
B A in Business Administration	7,300	900
Music, 4 year programme	45,300	5,700
Physician	37,100	4,600
Engineering, computer technology	31,800	4,000

3. Results since 1977

There are a number of results since 1977 that can be shown and commented on.

(i) For many "new" educations, especially in the medical and health care field, the entrance qualifications have been raised as a result of the common admission system. This change should contribute to a more qualified college education (in an academic sense).

(ii) Research organisation and doctoral education in social work has been built up in connection with the former schools of social work. Four out of six such schools are now integrated into a university and have a professorship each. That means that social workers now have the opportunity to continue with graduate studies in their own "profile subject", social work, and that research on social work problems can be performed by people with direct field experience.

(iii) A similar development is under way in the case of education for paramedical professions. Nursing research is being built up at a few universities in collaboration

between the medical and social science faculties on the university side and schools for training of nurses on the educational side. At the University of Umeå the first professorship in nursing research has been established temporarily, and it is expected to be a permanent chair within some years time. Also other subjects, e.g. physical rehabilitation within the faculty of medicine, have been opened to graduates from paramedical professional educations. A number of nurses, physiotherapists and medical assistants are engaged in doctoral work and some have already got their doctoral degree.

(iv) Not only for graduated from the paramedical educations but for many other graduated from the "new higher educations a number of courses specially designed to fill in the gap to graduate studies have been created. Special funds are allocated to the regional boards in order to facilitate the transfer to graduate education for these new student categories.

(v) Further education of teachers from the "new" higher educations have been arranged by means of regional board funds, in order to enable the teachers to introduce methods courses and recent research findings in the undergraduate education.

(vi) Special funds are "earmarked" to cover the costs for senior lecturers' leave of absence for research. By engaging in research activities during a semester or a year lecturers at the small colleges can contribute to better contact with research and promote "research relatedness" of undergraduate education.

(vii) Special funds have been allocated to development work in connection with the schools of art, music and performing arts. These funds are intended to further innovation in methods of work and also to bring activities and education together within art, music and so on.

(viii) Some of the small colleges established since 1977 have developed contacts with local industry, mainly small and middle-size enterprises, and have arranged courses and study programmes according to their needs, and also acted as intermediaries in contacts with university research. According to a recent committee proposal there should be special funds for this "information broker" function of the small colleges.

4. Trends and Problems

When the results of the 1977 reform of higher education are evaluated or compared to the intentions and ideas behind the reform it is necessary to know that the

present situation in Sweden is quite different from the one during the later part of the 1970's. The most important difference concerns the economic development. The beginning of the 1980's has brought economic problems and cuts in public expenditure to many countries, and Sweden is one of them. Even if higher education is a field of priority it has not been possible to avoid reductions. Also, the labour market has changed dramatically during the last few years, and a surplus of preschool teachers, dentists, nurses, physicians and social workers is expected as a result of tightened budgets within the social and health care sectors (which are public in Sweden). In this perspective the spreading out of higher education over country, which was done to increase the accessibility of higher education, has caused problems. There are strong local interests that protect the small colleges when we have to make contractions of the whole system. And we have a student peak to take care of when an expansion of the higher education is not realistic.

Looking back I think many people would agree that there are parts of the higher education reform in 1977 that should preferably have been differently designed. Among those parts is not, however, the idea of a single unitary higher education system. Especially in times of contraction it is an advantage to have a common planning system for all post-secondary education instead of separate systems. In such a system it is also easy to increase the proportion of young students when the age group of 18-20 years old is large and reduce it when the student peak has reached its maximum and the demand from young people is declining. Also, the principle of "research relatedness" for all post-secondary education has stimulated many discussions and activities in the direction of innovation and change within the group of "new" higher educations. And the chance for bringing problems from various professional activities and sectors of society into the focus of research is an important part of the closer relationship between higher education and society which in Sweden is regarded as a natural development and as an advantage for both parties concerned.

THE UNIVERSITY AS REPOSITORY OF UNSOLVED SOCIAL PROBLEMS – SHORTCOMINGS OF HUMAN CAPITAL-ISM

Sigurd Höllinger and Walter Steinbacher*

1. Experience and "Scientific-Bureaucratic" Planning

For many years we have been engaged in the planning of higher education by scientific methods. We have done a lot of research and have applied the results. We have produced a great amount of paper. In recent years, however, since we hear and read so much about the crisis and talk about it, we have become a little unsure whether all the problems universities are supposed to deal with and to solve, are in fact, problems of higher education. We have become quite uncertain about the quality of the solutions offered by technocratic perspectives and methods. Even policy-making seems increasingly difficult.

After many years of application of methods of analytical social sciences, we try a different approach: We should like to report experiences we have had in many discussions with academics, politicians, professional representatives, students and journalists. For a start we choose the style of a novel for our considerations. European cultural history may assist us to develop a few analogies. Thus, we approach the theme in a somewhat "undisciplined" way.

We shall start with an anecdote which seems to us a lucid example: Recently, leading officials of the Chamber of Architects (a body with obligatory membership which represents a profession whose members have an educational background which combines technical university studies and those of the fine arts) applied to the Ministry of Science and Higher Education for assistance. They were young and had been appointed only recently. In the last election of this body, the old leadership resigned. The profession is in a crisis. The younger architects, who are more heavily hit by this crisis, presumably want to master it by new policies which they expect from a change of generations. In this case, therefore, the crisis had political consequences, although they are limited.

In our opinion, there is a very simple definition of the architects' crisis, i.e. a lack of work due to a recession of construction industry.

* Ministry for Science and Higher Education Vienna, Austria

But in the view of the architects' new leaders there are other reasons for the lack of work. They explain it as follows: When public building industry stagnates for budgetary reasons, public invitations to tender, which allow small firms to enter competition, are rare. In the public sector, freelance architects are increasingly replaced by state employed architects, by public planning. There is also a lack of private clients. Furthermore, the architects suffer from the competition of non-university trained engineers and of constructors. In order to be more competitive, the architects would have to achieve a new role, i.e. an exclusive leadership in building industry.

This new role would not only correspond to the traditional architects' role, but would also include functions which were previously performed by the clients. Accordingly, the education and training of architects would have to be changed and adapted to a conception of "comprehensive qualification and responsibility" – a trend contrary to the increasing specialisation which has been pushed forward for twenty years. This could be achieved by further enlarged study programmes and by less optional subjects, thus every graduate could do absolutely everything in the field of architecture.

The definition and the solution of the problem as understood and proposed by the architects remain within the common framework of crisis management; less state-intervention, more market-orientation and more private leadership by means of concentration of responsibility in a ruling class, which is to be achieved mainly by re-privatisation of state functions.

The basis for this would be a new standardised and most comprehensive university education of architects. The architects' function ought to include an exceptional responsibility for the common good. Even if one assumes the validity of this view and solution of the crisis, the question remains how to increase the amount of money to be spent on building industry. If, for pragmatic reasons, we focus the feasible aspects of the architects' aid programme only, we come to the issue of university and crisis. Governments may alter the education of architects by stricter study regulations, a further increase of subjects and exam requirements and less optional courses. But the question, which remains unanswered, is: Does intelligence claiming for leadership work as a problem-shooter?

2. The Shortcomings of the Ideology of Human Capital

In order to master problems and crises, intelligence is necessary. This is probably a very old experience. In the oral tradition the interrelationship between crisis and intelligence is summarised in the proverb "Necessity is the mother of invention". Therefore

in Austria, as in other countries, an extensive programme to expand higher education has been promoted for more than two decades. The crisis now discussed is generally regarded as a recent one. Thus the 1960s programmes for the expansion of higher education might appear – in retrospect – as a kind of stockpiling for the present crisis.

The paradigm of human capital-ism is the primacy of science and education over all other factors of social development, including economic and political developments. Accordingly, science and education and the main regulating factors, in the economic sector as well. The continuation of economic growth and the modernisation of the economy thus appeared to be primarily a question of investment in human capital, of an increased promotion of science and of a greater use of highly-qualified personnel. That matched with the idea of developing a comprehensive strategy of expansion of human capital with the objective of "academising all areas of life" including politics. In this way, almost all economic and social problems were held to be solved.

From this point of view, the extension of access to higher education and to the universities became a primary target of education policy. The projections of the 1966 OECD Report on Austrian Education Policy estimated a demand for graduates in 1980 which will not be attained until 1990.

Doubtless, the ideology of human capital has also had some characteristics of a "doctrine of salvation", with science and higher education rating as means of salvation. This point of view resulted to a certain extent from experience. The economic significance of technological development was obvious but its actual impact remained unclear. The complex interaction of technical and economic developments was to a large extent neglected. In the decade of the largest economic growth in Austria the number of practising engineers remained constant. What then caused this growth? Those who benefited from a social inequality based on education and some educationalists were aware of the economic significance of educational investments, because they had learned by experience that the problem solving capacity of the higher qualified personnel was superior and that they enjoyed economic privileges. They applied this individual experience on the value of education without more intrinsic thoughts to society as a whole.

Thus it may be stated that the general acceptance of human capital-ism stems from the positive experiences gained with highly-qualified personnel and from the equally positive experiences of those favoured by educational inequality. Bearing this in mind a general expansion strategy of human capital seemed justified. If one looks at the practical consequences, however, human capital-ism cut the ground from under its own

feet. The increase of human capital endangers the returns of those favoured by social inequality through education and thus undermines the basis of its legitimation. The ideology of human capital had from its very beginning a built-in self-destructive mechanism.

Since the mid 70s the consequences of the expansion and the financing of the education sector have become a problem in many countries, due to the economic crisis.

This problem caused a kind of shock which could not be dealt with by explanations offered by the ideology of human capital-ism. Obviously, it also enhanced most of its supporters to look for new approaches. Thus, neither did the proponents of the education ideology of the 60s review or develop further the idea of human capital in the light of the new experiences nor did the increasing number of critics get beyond a pure reject of this ideology.

The former "doctrine of salvation" was transformed by many critics into a "doctrine of disaster". The opening of higher education, which had been started with such enthusiasm, was reverted into the catastrophic announcement of "the great flood" of university graduates. The advocates of disaster, however, have not given up the paradigm of the ideology of human capital-ism. They only turned the positive expectations into extremely negative ones. While the education ideology of the 60s supposed that almost all problems could be solved by education and science, now many problems are attributed to the expansion of education: The social levelling, the deficit of innovation in the Austrian economy, the export problems in business, the youth delinquency, young people's animosity against science, illicit business and crime, terrorism wherever it occurs and so on. One really can't guess how to manage all this by education policy the later obviously must have demonic powers at hand.

Despite its superficial arguments the polemic against an expansive education policy, found an audience. The crisis which began in the second half of the 70s produces with many professionals and leading executives, who had no strong political convictions, a sense of helplessness which increased the demand for a scape-goat.

E.g. after weary and unsuccessful export talks, it was at least comforting for the firm involved to hear that its representative body attributed difficulties in export business to an insufficient foreign-anguage training of university graduates.

We may learn something important from these experiences. It is precisely in its negation that two features of human capital-ism become visible. The optimistic view of human capital-ism in the 60s tended to ascribe too many problems to the education sector, thereby delegating them to the new generation, whereas they should have been

solved whenever they became apparent and not in the distant future by the "young one". The spokeswoman of an Austrian youth organisation was perhaps not wrong when she recently declared that the slogan "Our youth – our hope" is increasingly perceived as a threat by young people.

3. Belief in Progress/Scepticism about Progress

Doubtless, we do have a crisis of the international economic system. But it is questioned whether the way out of the crisis will follow the path of "progress". It has not only become doubtful whether more investment in human capital leads almost automatically to growth, but also whether growth in its former dimensions is possible and desirable. Strong reservations exist against technical developments as the following catchwords illustrate; criticism of technology, scepticism about science, criticism of economic growth, ecology. As you may know, Austria's first and only atomic power station was not put into operation because of referendum. At the moment – for environmental reasons – there is widespread public argument about the building of a river power station.

Contrasting with the scepticism about progress, influential pressure groups, however, hold the certainly justifiable opinion that the present economic crisis can, if at all, primarily be overcome by a new wave of innovation. One of the strategies is the modification of technical study programmes at universities.

Contrary to the almost unbridgeable gap between sceptics about progress and those in favour of accelerating it by concrete projects, there are signs of a compromise when it comes to the reform of technical studies, at last between the moderate supporters of the two groups, although they favour completely different things. The basis of this compromise is the fact, that for both sides the education system is the key for the management of the crisis of technical developments. Many statements of the Austrian Confederation of Industrialists how, that they regard the technical universities primarily as a recruiting field for leading executives. Engineers of the traditional type do not show the adequate behaviour. They lack economic hand social abilities as well as a sufficient knowledge of foreign languages.

For the sceptics about progress on the other hand – to whom the Confederation of Industrialists does of course not belong – the modification of a biased engineers' training is also important. They expect engineers who have better education, to be more conscious of the results of their work. Thus it would be possible to prevent rather problematical technical developments. Engineers who, for example, are already confronted

with the problem of pollution during their studies would pay attention to it as professionals. For this reason engineers should have a basic knowledge and a basic understanding of ecology, etc. Therefore, they agree with the former mentioned group that the aim of the coming technical reform is a new type of engineer who apart from his technical and scientific knowledge, has a comprehensive economic, social and ecological education. The difference between the various parties in the debate is the evaluation of the non-technical education. But, we shall see, this disagreement may be settled. In order to educate "the new engineer", conditions at the technical universities will have to change. But there one faces important problems. In Austria the study programmes in engineering are already time-consuming and most intensive. They do not allow for additional subjects. The way out of this dilemma is labelled "differentiation": The present study courses are to be de-specialised and shortened by a fixed duration of a basic course. The necessary specialisation is to be acquired in additional study courses. In this way, inter-disciplinary courses can be integrated.

Of course, teaching will also have to be changed as well as the quality of learning. The aim are students who recognise and solve problems more efficiently, who are self-reliant, able to deal with social problems and go on well with people in short: Who make a comprehensive approach when embarking in their duties as "the new engineer". The papers which have already been presented in the debates on study reform contain impressive lists of inter-disciplinary courses. The result of this reform is to be a new differentiation in the engineering professions. In future we shall have to have not only engineers with a degree after a vocational education, but also two kinds of university graduates; those with a lot of and those with but little inter disciplinary education.

It seems that for the first time in the more recent history of university policy the proposal we described is shared by the university, too. The engineers, who have had a rather ambiguous self-esteem and have to some extent – the image of a proletariat among university graduates, as well as the technical universities welcome it as a step which would raise their prestige.

Thus we would have a very good starting – point for a modification of study courses. If we now remember the beginning of our consideration, i.e. the crisis of the architects' profession, we realize that the reform programme of the architects' professional representation fits nicely into the plans we have just mentioned, because the basic intentions match: The problem of specialisation is settled by hierarchisation, and an increase in prestige of the engineering profession is achieved by emphasis

on leadership functions. But this agreement raises the same doubts which the architects' aid programme has already provoked.

4. In Defence of Universities: Higher Education Cannot Function as a General Problem-shooter

When considering the problem of the architects, the question already arose, how they should attain their comprehensive planning, co-ordinating and technical qualifications and whether they would be capable to accept such an extensive role. This new engineer would not only have technical, but also sociological, economical, psychological, philosophical, ecological and other qualifications. He would speak at least one foreign language. He would be equipped with management abilities and organisational skills, would be creative, disciplined, efficient and show an extraordinary sense of responsibility. He would at the same time pay attention to economic developments, to environmental problems, to the humanisation of working life and a lot more. He would in fact, be the "new man". But we would not have this "superman" until after the turn of the millenium. Some calculation might illustrate this point:

One may estimate that it takes ten years to carry out the reform. Add to this ten years until first graduates complete their enlargement courses. It will take another ten years until they are integrated in professional life in noticeable numbers and perhaps another ten until the new engineers are in higher rank positions. That makes forty years.

The reform would become effective around 2020. So we shall not live to see neither the new technics nor the new technician.

It would be an honourable gesture to leave our descendants something good. But the problem is that we have the crisis now and not in 2020. One has the unpleasant suspicion that the ideas to modify the curricula of engineering studies has something to do with the crisis but not with its solution. We may take a closer look at this suspicion. We start with the old, plausible hypothesis that the universities and the discussion about the university are always mirrors of a particular time. This may be true or not. In any case, the pictures are present in the mirror for quite a long time. For example, environmental problems were not of interest at technical universities for a long period. If environmental protection is an innovation, it has obviously originated somewhere else and made its way largely outside the university. But problems are not solved by being mirrored in the university. Regarding the management of the crisis in the architects' profession, we have seen that such a programme, from a pragmatic point of view, could only be carried out in one respect – as a reform of study courses.

And even when – in some distant future – we have the new "superarchitect" with all his qualifications and sense of duty, he, too, would find it difficult to increase the demand for architects – unless the Austrian society should decide to make building an end in itself. This is a malicious fiction.

A central problem for university emerges which may cause immense damage to it. In addition to its already numerous functions a new task might be ascribed to the university. The university could become a repository for unsolvable social problems, which are submitted to university, where they are symbolically dealt with. Some "recipes" for problem-solving, which are formulated as claims to university education, are quoted as an illustration and are by no means meant ironically:

- If the architects do not find a clientele, the students of architecture must create a new image for this profession.
- If technical developments run out of control, students at technical universities must develop a greater sense of responsibility for the results of technical developments.
- Environmental problems can be checked by study reports on environmental protection.
- If industrial executives lack qualifications, students are offered courses in management and sociology of organisations.
- In order to overcome difficulties of the export business, we improve foreign-language training.
- If our society cannot see the wood for the trees, at least engineering students are taught a comprehensive approach.

A novel of an Italian author and semasiologist[1] may serve as a metaphor of the contemporary condition of the university. The author describes events in a monastery in the early 12th century. Two delegations meet to negotiate the re-distribution of the hegemony between the church and the state. This is linked with a discussion about different concepts of a pious (today we would say good) life, which is carried on between the representatives of a rich regular clergy and of a mendicant friar. The later is subjected to a permanent control by the people due to the order's dependence on alms-giving. The story has several endings. The negotiations break down, the monastery burns down and with it one of the largest monastical libraries. In the course of these events, however, a series of mysteries in the monastery is solved. The key to the mysteries seems at first to be an old prophecy which mentions the signs describing doomsday, which are marked by the coming of the Anti-Christ. But this turns out to be a mistake. Events do not become meaningful by an end, by technological reasoning, but the details

show their own sense. Thus the key are such details, miniatures and the reflections on a comedy which turn the official view of the world and the realm of wisdom upside down.

We shall largely stick to this metaphor when we attempt to describe a new function of the university which may develop.

As the place for ersatz- (incantatory) activities, the university recurs to one of its origins in European history. For necessity is not only the mother of invention, necessity also teaches us to pray, as the saying goes. In this way the university would become similar to some medieval monasteries, in which a chosen throng of monks lived in solitude and free from material concerns, fasting and living abiding by strict rules to atone for all sins and praying for the world's salvation. At the same time their churches, in accordance with the accumulation of sins, became filled with the altars founded by the lords, on which they sacrifice daily. Only the old gods are dethroned and new ones have taken their place. They no longer have names, they are principles. The monks buried the founders of their monasteries, churches and altars in their crypts. The students of architecture per procuration for the architects mourn the loss of clients. For this loss is their real problem.

A great deal of the discussions about management and responsibility is devoted to talks about power and rule. Therefore, we cannot neglect the problem of power. In order to raise this point, we shall make another detour into history, although some might not accept it as appropriate. Annalists teach us that there have been many great lords and masters in European history. One of the greatest, most venerated and most frequently portrayed was the great Caesar in ancient Rome. His name as emperor has become a prevalent concept for rulers in general. For centuries the European ruling houses referred to their descent from this ancient hero to legitimate their rule. If there is any historical model for the new "superman", he could it for it. He was a descendant from an ancient nobility, he was one of the most educated men of his time, an excellent man of letters, a supreme military commander and he was also prominent as a patron of constructors. The Romans piled honours on him for his many services and devorated him like a sacrificial bull, as one of his contemporaries remarked. But he was murdered, too. Now a German historian has re-written the history of the great Caesar, taking into account the circumstances in which he lived[2]. Of course, Caesar remains a great man. What is new about his history is that the author also shows his limitations. He calls these a crisis with no alternatives. This is characterised by the fact that a common unease may araise which cannot – in the sociological sense – be

specified, i.e. cannot be formulated as a problem, which can be dealt with by means of politics. In such a crisis a Caesar can display an optimum of violence within the prevailing conditions. Caesar was in fact one of the greatest warriors in history.

But the historian, we refer to, maintains that Caesar had no change to master the circumstances; quite the contrary, he was driven by them. They fostered extremely his violence, but prevented him from policy-making.

Therefore, he constantly escaped into new wars – away from political tasks which could not fulfilled. Having made this deviation, we return to our topic. In the future the technological development could perhaps lead to a development of unprecedented violence. But nothing guarantees that this would enable us to regain control over circumstances. The universities would perform two functions in this crisis without alternative.

They would potentially contribute to the development of this violence and at the same time become a place of lamentation about the loss of control over circumstances. Like the monasteries, they would house lost glory and like the architects would complain about the loss of clients. The questions, how the crisis with no alternative came about, what role the intelligence played in it and how it came to an unhappy end, may be looked up in the book just quoted.

Of course we do not offer a solution. Anyway, we cannot have one as individuals. We only tried in rather un-disciplined way to apply historical analogies, to show the danger of how the university could become the repository of problems of the society which are not solved where they should be solved (if they actually could be solved).

The task which remains is that of separating issues of university reform and performance from those problems which are only misinterpreted as university issues. The latter can be dealt with at universities only in a symbolic and fabricated way, but cannot be managed there.

References

1) ECO, Umberto: The Name of the Rose, 1980, English translation 1983 by Harcourt Brace Javanovich

2) MEIER, Christian: Die Ohnmacht des allmächtigen Diktators Cäsar, Frankfurt 1982

THE DIFFERENTIATION BETWEEN UNIVERSITY AND OTHER FORMS OF HIGHER EDUCATION IN THE UNITED KINGDOM WITH PARTICULAR REFERENCE TO THE ENGLISH POLYTECHNICS

J.H. Thompson*

This paper is addressed for the most part to the polytechnics in England but the form of differentiation which it describes is found throughout the United Kingdom. It is no new phenomenon. If one dates the development of modern higher education from the Robbins report of the sixties, even then (1962 – 63) 40 per cent of full-time higher education students were found in non-university colleges. The expansion of higher education since then, though often described in terms of new and expanded universities, was a period in which non-university higher education also developed and expanded. Today very nearly half the full-time students in higher education in England are found outside the universities.

This dual form of higher education is known as the binary system. This paper first describes its main features today as reflected in a comparison of universities and polytechnics and then looks more broadly at the principles which underlie it.

The 45 universities in the United Kingdom** are bodies established by Royal Charter or by statute. The effect is the same: They are independent self-governing communities of scholars with the right to award their own degrees. They are also heavily dependent on public funds in the form both of grants from the state and of tuition fees paid by the state on behalf of most home students. The reconciliation of institutional autonomy with financial dependence on the state is achieved through the University Grants Committee, a central body appointed by but not beholden to Government, which allocates grant to individual universities but does not determine in detail how it is spent by them.

The main characteristics of university education in the United Kingdom are that almost all students will be undertaking degree level or postgraduate study. They will be taught in institutions where considerable staff and other resources are devoted to

* Under-Secretary Department of Education and Science, London, U.K.

** The Open University is left out of account throughout the paper; so is the one private university (Buckingham).

research. About 10 per cent of undergraduates will be "mature" (that is they will have started their courses after 21); only 1.0 per cent will be on part-time courses. Comparatively few students live at home. Nearly 25 per cent are postgraduates. Universities are national institutions in terms of funding and student enrolment with, in many cases, international reputations for scholarship and research. At first degree level, and in round figures, 15 per cent of students are in engineering and technology, 25 per cent in science (and a further 10 per cent in medicine) and rather more than 25 per cent in social, or professional studies. (Fuller particulars are in Annex A.)

This is a very general description of the universities and inevitably conceals a number of important diverse characteristics (see paragraph 20). However, it will serve to point up the main differences between universities and polytechnics. The 29 polytechnics in England are owned and funded by their local education authorities, not grant-aided by central government. That is to say, all the public funds they receive apart from tuition fees are voted locally, albeit from resources to which central government has contributed about a half. With the exception of the 5 Inner London Education Authority polytechnics, none is a corporate body, though each has articles and instruments of government and a governing body. They award not their own degrees but the degrees of the Council of National Academic Awards (CNAA), a national body which validates all degree level courses outside the universities. Since 1982, however, the polytechnics (in company with all other forms of higher education maintained by local education authorities) have been subject to the planning decisions of the new National Advisory Body for Local Authority Higher Education (NAB), which advises the Secretary of State on the academic programmes and allocations of money for each institution. The total available is set by central government. Thus there are now financial arrangements and a planning body somewhat akin to the UGC for higher education outside the universities in England; and there is a parallel body, the Wales Advisory Body (WAB).

The main characteristics of the education offered in polytechnics which distinguish them from universities are that a third of polytechnic students attend courses part-time or in the evenings only, and that about 30 per cent are taking sub-degree courses. (There is also a small amount, about 5 per cent, of non-advanced further education in polytechnics). Only 4 per cent are post-graduates. The amount of time devoted to research work is variable and for the most part is applied research, rather than fundamental. About 20 per cent of polytechnic students are in engineering and technology, 15 per cent in science and 40 per cent in social, business or professional studies. (Fuller

particulars are in Annex B.)

These broad descriptions of university and polytechnic education are offered to illustrate the present dual system of higher education now obtaining in England. Two additional points should be noted. The first is that whereas the Polytechnics provide 65 per cent of higher education courses for full-time students outside the universities, they provide only 40 per cent of such courses for part-time students. There is, therefore, significant provision for higher education outside both the universities and the polytechnics. It is, however, very widely spread over some 250 colleges, most of them maintained by local education authorities in much the same way as polytechnics and falling within NAB's remit. But 30 of these colleges are independent institutions grant-aided by central government and they alone count for 12 per cent of full-time higher education students outside the universities. About twenty of the grant-aided colleges are mainly concerned with teacher education, 3 with conservatoire music, 3 with agriculture, one with postgraduate art and design, one with postgraduate technology.

The second point to note is that whereas the characteristics of university and polytechnic education as described in this paper apply with differences of scale to Wales, there are no polytechnics as such in Scotland. There are, however, non-university colleges known as "central institutions" which are broadly devoted to higher education but which are funded by central government, not maintained by local authorities. In Northern Ireland there is one polytechnic which interestingly is in the process of being merged with a university. The result will, therefore, be a university undertaking some sub-degree work and some non-advanced work, the first such university in the United Kingdom.

The rest of this paper looks at the principles which underlie this dual system of higher education from its formulation in the mid-sixties and considers their achievement and continuing relevance.

As already indicated, higher education in recent times has never been a university monopoly. However, the binary policy adopted in the mid-sixties in the wake of the Robbins report established the dual nature of higher education in positive terms for the first time. To an extent this flowed from the rejection of two of the recommendations of the Robbins report[1], namely the creation of six further new universities and the marshalling of the teacher training colleges under the wing of the universities. Had these recommendations been adopted they would have promoted the universities to a position of dominance. Their rejection served, therefore, to maintain an equilibrium between university and non-university higher education. But the Government of the

day took the opportunity to set out in very clear terms and on the eve of the expansion of higher education their objectives for the non-university sector of higher education[2].

This policy was expressed as a rejection of a hierarchical system of higher education with the universities at the top. The non-university institutions were to have a role which was distinctive from that of the universities and they were not to ape them. The aims of the policy were:

(1) To meet the demand for vocational, professional and industrially based courses and to upgrade such education;

(2) To do so in institutions which were under "social control", that is to say in institutions which would be responsive to both local and central government in a way which (it was implied) autonomous universities might not be;

(3) To provide a means (the CNAA) by which degrees of an equivalent standard to university degrees might be awarded;

(4) To stress the value of part-time, sandwich and sub-degree courses to the economy, and

(5) To ensure that such courses should be provided alongside full-time degree courses.

The last point is particularly important since it denied universities a monopoly of full-time degree courses. Many of the early critics of the binary policy would have settled for a non-university higher sector confined to part-time or sandwich courses. This was rejected by the Government of the day as educationally and socially divisive. More positively it was believed that the standards required to provide full-time degree courses would rub off on part-time and sandwich courses and help to upgrade these modes of education.

It should be stressed that these policy objectives were stated for non-university higher education as a whole. The establishment of the polytechnics was a separate if related decision, designed to concentrate provision economically in large institutions offering a wide variety of courses and serving the industrial and commercial needs of the area. The polytechnics were formed for the most part by the merger of a number of existing institutions and grew in size and role in the seventies when in some cases they absorbed teacher training colleges or more generally developed arts courses to meet demand from students who, but for the contraction of teacher training, would probably have sought teaching courses.[3]

The extent to which the policy objectives set for non-university higher education in the mid-sixties have been fulfilled is not easy to assess. Taking the polytechnics by

themselves the distinctive characteristics summarised in paragraph 6 (part-time, sub-degree and vocational courses) have apparently become less marked, even though in some cases absolute numbers have increased as total numbers of students expanded. The figures are set out in Annex B from 1973 (when all polytechnics had been established) to 1981. Sandwich courses, however, have increased both absolutely and proportionately; and care must be taken not to underrate the simple achievement of absorbing the growth in demand for full-time degree courses from increasing numbers of 18-year olds. It is also something of an achievement to have maintained the distinctive characteristics of the sector to the extent revealed without any central planning machinery until 1982.

However, this may be, the new planning body, the NAB, have reaffirmed the emphasis on sub-degree, part-time and vocational courses in its plans for 1984-85. Students on sub-degree courses are to go up by 10 per cent compared with 1982-83, as against 6 per cent for first degrees and above. Students on part-time courses are to go up by 6 per cent and the figure would have been higher if higher demand had been expected. Annex C shows the very substantial planned shifts towards science, engineering, mathematics and business studies. (It should be emphasised that these planned growth figures relate to the local authority higher education as a whole, not simply to the polytechnics.)

Finally, to what extent does the policy of differentiating between university and non-university higher education hold for the future? The establishment of the NAB in 1982 as the planning counter-part of the UGC appears to settle for the foreseeable future that higher education is to be planned on the basis of at least two sectors. The NAB is due to be reconstituted in 1985 and is expected then to widen its remit to include the 20 or so independent grant-aided colleges devoted to teacher training (paragraph 7). If this is the only significant change to emerge from the review of NAB's future, however, it by no means follows that planning will become set firm in two moulds.

The present UGC/NAB division rests on inherited differences of constitutional importance – university autonomy and local authority ownership – with which have been associated significantly different funding systems. Whilst, as has been noted, the two sectors have also developed different characteristics of provision they also have (in the full-time first degree courses in particular) considerable common strengths. Co-operation and joint planning not least as student demand falls dramatically in the late 80's and early 90's will be a necessity.

Paradoxically the formation of NAB makes such joint planning possible as hitherto

the UGC has had no equivalent body to relate to on the local authority side. Already UGC and NAB have formed a number of "transbinary" planning groups on particular subjects. Both are engaged in major surveys of future higher education strategy which although organised separately are likely to be assessed and appraised together. Communication from central government already takes the form of "letters of guidance" to both UGC and NAB which while dealing with sectoral matters also foster practical co-operation. Of course the challenge of declining student demand will be substantial and it would be naive to expect that sectoral loyalties will be submerged. But it is a strength for the future that NAB is established, dialogue with the UGC begun and a common framework for an agenda agreed.

One argument which is urged against the dual policy for higher education as it has developed in the United Kingdom is that it suppresses, or is liable to suppress, diversity as between institutions. This needs examination because of the common assumption that such diversity is to be encouraged. (A major non-governmental review of higher education published in 1983 took as its title "Excellence in Diversity".)[4]

As it happens the encouragement of diversity was one of the then Government's arguments for the dual policy when it was being developed in the sixties. Diversity was then used, however, to mean little more than that polytechnics would be different from universities. In fact, with the benefit of twenty years' experience, it is possible to point *within* the university and the local authority sectors of higher education to institutions which have developed in significantly different ways. The result has been not two sets of broadly similar institutions so much as a range of institutions on either side of the sectoral divide. Too many coded examples would be tiresome for an international audience but there are university colleges which specialise in part-time undergraduate teaching and adult education. There is a polytechnic where almost all students are part-time and one where there are almost none. There is one polytechnic where almost all courses are modular; and examples abound in both sectors of different ways of encouraging breadth of study. Sandwich course education is well promoted in certain universities as well as in the polytechnics. Those universities which crossed the sectoral boundary in the sixties, having been Colleges of Advanced Technology, still emphasise their strength in technological studies; and some polytechnics diversified their courses without losing their technological strength. Though the term is not used, there are what would be called elsewhere "liberal arts colleges" in both the local authority and grant-aided sectors as well as a range of monotechnic specialist colleges from mining to music.

The threat to such examples of diversity would come from management or funding

policies which were too blunt to protect them; or because a different value was set on them in changed or changing circumstances. Indeed, it is arguable that the advantage of having different management structures in the UGC and NAB at a time of planned decline is that more than one view can be taken of divergent patterns of education and exceptional measures taken to preserve them.

Some would see the future decline in higher education demand as threatening the particular strengths of the two sectors. As noted in paragraphs 4 to 6, the sixties' binary policy has resulted in significantly different emphases in provision, though with a band of first-degree work common to both sectors. If overall provision shrinks substantially the greatest risks to the sixties' pattern are probably to first degree work in the local authority sector to the extent that it is not closely vocational; and to part-time provision there in that universities near centres of population may seek to develop such courses for undergraduates. The local authority sector with its spread of work among a large number of colleges is likely increasingly to concentrate provision on the polytechnics and larger non-polytechnic colleges. Part-time and sub-degree provision might remain elsewhere in strength but the sixties' connection between this work and full-time degree work would be broken. Both sectors are likely to seek to increase provision for various forms of continuing and adult education.

The shape of future provision is at present uncertain. What can be said is that the binary policy established in the sixties has produced strong university and non-university sectors, with noticeably different characteristics and adequate diversity of strengths within them. It has also resulted in management structures capable of planning for reduction as well as expansion and with the will to co-operate.

ANNEX A

Universities in England

1. Student Number by Mode of Attendance (thousands)

	1973 – 74		1977 – 78		1981 – 82	
	Nos	%	Nos	%	Nos	%
Full-time	177.5	84.8	206.1	85.1	220.9	84.0
Sandwich	21.1	5.8	13.4	5.5	14.3	5.4
Part-time	19.6	9.4	22.8	9.4	27.8	10.6
TOTAL	209.4	100.0	242.3	100.0	263.0	100.0

2. Student Numbers by Qualification Aim (thousands)

	1973 – 74		1977 – 78		1981 – 82	
	Nos	%	Nos	%	Nos	%
Full-time/sandwich						
Postgraduate	39.5	20.8	40.7	18.5	38.7	16.5
First degree	147.9	77.9	176.6	80.3	193.9	82.4
Other	2.4	1.2	2.6	1.2	2.5	1.1
TOTAL	189.7	100.0	219.5	100.1	235.2	100.0
Part-time						
Postgraduate	17.1	87.2	19.9	87.4	24.1	86.9
First degree	1.2	6.2	1.7	7.4	2.4	8.5
Other	1.3	6.6	1.2	5.2	1.3	4.6
TOTAL	19.6	100.1	22.8	100.0	27.8	100.0

3. Full-time/Sandwich Students by Subject of Study (thousands)

	1973 – 74		1977 – 78		1981 – 82	
	Nos	%	Nos	%	Nos	%
Education	7.7	4.0	8.7	4.0	10.8	4.6
Medicine	20.1	10.6	23.2	10.6	24.8	10.5
Engineering	29.1	15.4	33.4	15.2	35.1	14.9
Science (incl. agriculture)	50.2	26.5	53.9	24.5	59.0	25.1
Social studies	41.4	21.8	51.6	23.5	54.7	23.3
Professional studies	3.3	1.8	4.1	1.9	3.8	1.6
Languages	23.5	12.4	27.5	12.5	29.4	12.5
Arts	14.4	7.6	17.2	7.8	17.6	7.5
TOTAL	189.7	100.0	219.5	100.0	235.2	100.0

ANNEX B

Polytechnics in England

1. Numbers on Advanced Courses by Mode of Attendance (thousands)*

	1973		1977		1981	
	Nos	%	Nos	%	Nos	%
Full-time	43.8	39.6	59.0	40.9	79.3	43.5
Sandwich	24.2	21.9	34.2	23.7	43.0	23.6
Part-time	28.1	25.4	36.3	25.2	44.0	24.1
Evening	14.5	13.1	14.8	10.3	16.1	8.8
TOTAL	110.7[a]	100.0	144.3[a]	100.0	182.5	100.0

[a] Figures available are for England and Wales: These have been notionally adjusted to give England only.

2. Full-time Equivalent Student numbers by aim of Qualification (thousands)*

	1973 – 74		1977 – 78		1981 – 82	
	Nos	%	Nos	%	Nos	%
Advanced						
Postgraduate	3.1	3.5	3.9	3.4	5.2	3.6
Degree	36.7	41.1	63.6	55.7	86.7	60.7
Sub-degree	40.6	45.4	40.6	35.6	44.0	30.8
TOTAL	80.4	89.9	108.1	94.7	135.9	95.2
Non-advanced	9.0	10.1	6.1	5.3	6.9	4.8
TOTAL	89.4	100.0	114.2	100.0	142.8	100.0

3. Full-time Equivalent Numbers on Advanced Courses by Subject of Study (thousands)*

	1973 – 74		1977 – 78		1981 – 82	
	Nos	%	Nos	%	Nos	%
Education	3.5	4.4	1.0	0.9	0.3	0.2
Medicine, etc.	3.1	3.9	4.4	4.1	5.1	3.8
Engineering/ technology	18.3	22.8	23.9	22.1	27.8	20.5
Science	11.3	14.1	15.3	14.2	23.1	17.0
Social, administrative and business studies	27.3	34.0	41.4	38.3	48.4	35.6
Professional and vocational studies	8.0	9.9	9.6	8.9	10.5	7.7
Languages, literature	2.0	2.5	3.3	3.1	4.0	2.9
Arts	1.6	2.0	1.2	1.1	6.6	4.9
Art, design, music and drama	5.2	6.5	8.0	7.4	10.0	7.4
TOTAL	80.4	100.0	108.1	100.0	135.9	100.0

* Excluding teacher training

ANNEX C

TABLE: NAB Academic Planning Exercise 1984/85: Summary by Programme of Proposals for First Year Intakes to Full Time and Sandwich Courses

Programme	1982 Actual No. (in '000)	1982 Actual As % Total	1984 Proposed No. (in '000)	1984 Proposed As % Total	% change 1982 to 1984 (col. (1) to col. (3))
	(1)	(2)	(3)	(4)	(5)
A. Initial teacher training	8.4	9.9%	8.1	9.4%	−4%
B. In-service training and other education	1.5	1.7	1.4	1.6	−3%
C. Pharmacy and Paramedical	3.5	4.2	3.5	3.9	−1%
D. Engineering (incl. mining)	10.2	12.1	11.8	13.6	+15%
E. Surveying and miscellaneous technologies	2.1	2.4	2.3	2.7	+10%
F. Agriculture and forestry	0.3	0.3	0.3	0.3	+13%
G. Sciences	6.7	8.0	7.2	8.3	+7%
H. Mathematics and computing (incl. most IT)	3.7	4.4	5.5	6.3	+49%
I. Business studies, accounting and law	15.9	18.9	16.7	19.3	+5%
J. Misc. social studies, psychology and administration	8.9	10.5	8.1	9.4	−9%
K. Architecture, planning, home economics, hotel catering and other professional studies	6.9	8.2	6.9	8.0	–
L. Languages	2.3	2.7	2.1	2.4	−5%
M. History, philosophy and other humanities	4.8	5.7	3.9	4.5	−18%
N. Art and design (incl. drama and music)	9.3	11.0	8.9	10.3	−4%
TOTAL	84.4	100.0	86.7	100.0	+3%

Notes: a) Percentage changes in column (5) calculated on unrounded figures. 1984 figures subject to confirmation.

b) Figures include (mainly in programme H) all students provided for by the IT initiative.

Notes and Bibliography

1) Higher Education: a Report of the Committee appointed by the Prime Minister under the Chairmanship of Lord Robbins 1961-63.
2) Speeches by the then Secretary of State for Education and Science, Rt Hon Anthony Crosland MP at Woolwich and Lancaster, 27 April 1965 and 20 January 1967 respectively.
3) White Paper (1966), "A Plan for Polytechnics and other Colleges".
4) The final report of the Leverhulme Programme of Study into the Future of Higher Education (The Society for Research into Higher Education).

INNOVATION IN JAPAN'S NEW-TYPE (SHINKOSO) UNIVERSITIES – THE EXPERIENCE OF THREE UNIVERSITIES –

Shinroku Saito

1. Introduction

After WWII, the Japanese educational system changed from multi-track to a unified or single track 6-3-3-4 type. Under this system, many varieties of higher education institutions were incorporated into a new unified university sector. In 1946 there were only 48 institutions called "university" in Japan, but by 1950 this increased to 201 due to the promotion of many institutions to university status. As this new educational system came about, Japan experienced a huge expansion in education marked by a shift from mass to para-compulsory education at the high school level and a change from elitist to mass education at the university level.

In spite of the obvious success at quantitative expansion, universities came under considerable criticism for having lowered the quality of education.

The late 1960's saw a world-wide educational reform with Japan as no exception. The main issue of reform during this time was how to respond to changing quality under the pressure of tremendous expansion.

One of the leading forces behind reform in this era was the Central Council for Education. The Central Council's report (1971), provided the guidelines for a "3rd Major Educational Reform". Japan had already experienced 2 very drastic reforms in her history; the first was the Meiji modernization reform, the second was the immediate post-WWII reform.

Proposals made by this group, published in 1971 after an intense 4 year period of study and debate, continue to influence Japanese education. The fundamental policy issues of higher education outlined by this council consisted of 13 items, with emphasis placed on the need for diversification of higher education institutions. Although all of the proposals made in this committee report could not be actualized, some did help to bring about change. Just recently these proposals have been brought up again for discussion and their usefulness as guidelines for the future development of higher

* President, Technological University of Nagaoka

education structure has been considered.

The financial constraints from the late 1970's slowed down both educational expansion and reform however the reform toward diversification and flexibility in higher education continues.

Recently, three principle methods of diversification have been put into practice. The first is the creation of new universities with new structures in order to promote more diversified development in higher education. The University of Tsukuba for example has taken the role of pioneer as a new-comprehensive university. Tsukuba has introduced substantial reforms in teaching, research and administration.

The University of Technology and Science of Nagaoka and the University of Technology and Science of Toyohashi were established in 1976 in order to create a new breed of practical engineers. In the field of education since 1978, three universities for teacher education; the Hyogo University of Teacher Education, the Joetsu University of Teacher Education and the Naruto University of Teacher Education were created for the promotion of in-service training and practical educational research. In 1981 the Kanoya National Institute of Physical Fitness and Sports was build for training community physical education leaders.

The second way of initiating diversification is reform in adult or lifelong education. For example, changes have been made in the entrance exam system to allow adults to enter traditional universities and extension programs have been developed to make the university more open to the community. In addition to traditional university reform, special new-type universities were established in order to promote adult education. Distance education is beginning with the University of the Air which provides televised courses. The Toyota Technological Institute was created to give a sound recurrent education for adult high-school graduates in the field of practical engineering.

The third method is the upgrading of Technical schools and "miscellaneous schools" which were previously outside the normal school-educational system. These schools play an important role in providing a wider range of educational choice for post-secondary graduates. Recently governmental recognition of many of these schools has been granted.

2. Three Examples

In the previous section, 3 main ways of diversification were discussed. This section will focus on the first method, the establishment of new universities. Three examples will be presented. The first 2 cases are new universities and the third is the reform

of a traditional university.

Case A-The University of Tsukuba

The most outstanding example of a new-type university is the University of Tsukuba which was established in 1973 under support from the Japanese Ministry of Education, Science and Culture. Although a new university, Tsukuba's roots were in the old Tokyo University of Education.

The purpose of establishing Tsukuba was to update and re-organize traditional teaching and research as to provide a more flexible and interdisciplinary approach to university education and research. Tsukuba was also designed to be a university which was more open to the community and to the world. The traditional university system has not been able to keep up with rapid social change. To accomplish these aims, an overall university reorganization was carried out. The major characteristics of this re-organization are summarized as follows: 1) A clear organizational division of the research and teaching function 2) A centralized system of administration 3) Emphasis on community service and international activities.

Firstly, organizational separation was carried out by functionally differentiating the organization of teaching and research. The teaching is carried out by the gakugun (college or school) and the gakkei (research division) concentrates on research. There are also special research projects.

Undergraduate education is done through two types of institutions, 1) colleges and 2) schools. The college provides a broad selection of areas for study centering around one major study field or discipline. The schools provide a more specialized education in medicine, physical education and the fine arts.

While traditional universities are composed of faculty units with low emphasis on undergraduate education, Tsukuba has increased emphasis upon it and has institutionalized measures to deal with problems in undergraduate education.

At the graduate level there are 2 separate types of programs; the masters course(2 years) and the doctoral course(5 years). The masters course trains professionals and also provides continuing education for adults in the business world (for example their Graduate Program in Management Science and Public Policy Studies), public officials and teachers. The doctoral course is for training researchers capable of original research. Tsukuba's doctoral course differs from the traditional ones in that students enter directly into a 5 year doctoral program.

Research is carried out in the 26 research divisions, each of which is an operating

Figure 1. Flowchart of curriculum formation and management in the University of Tsukuba

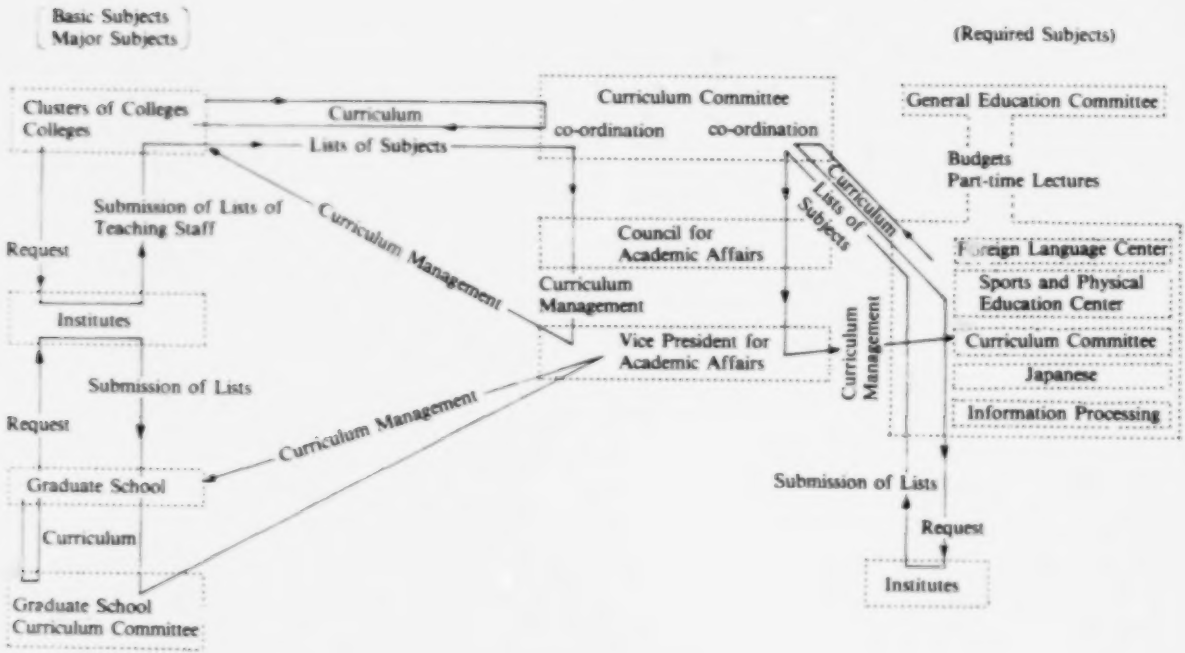
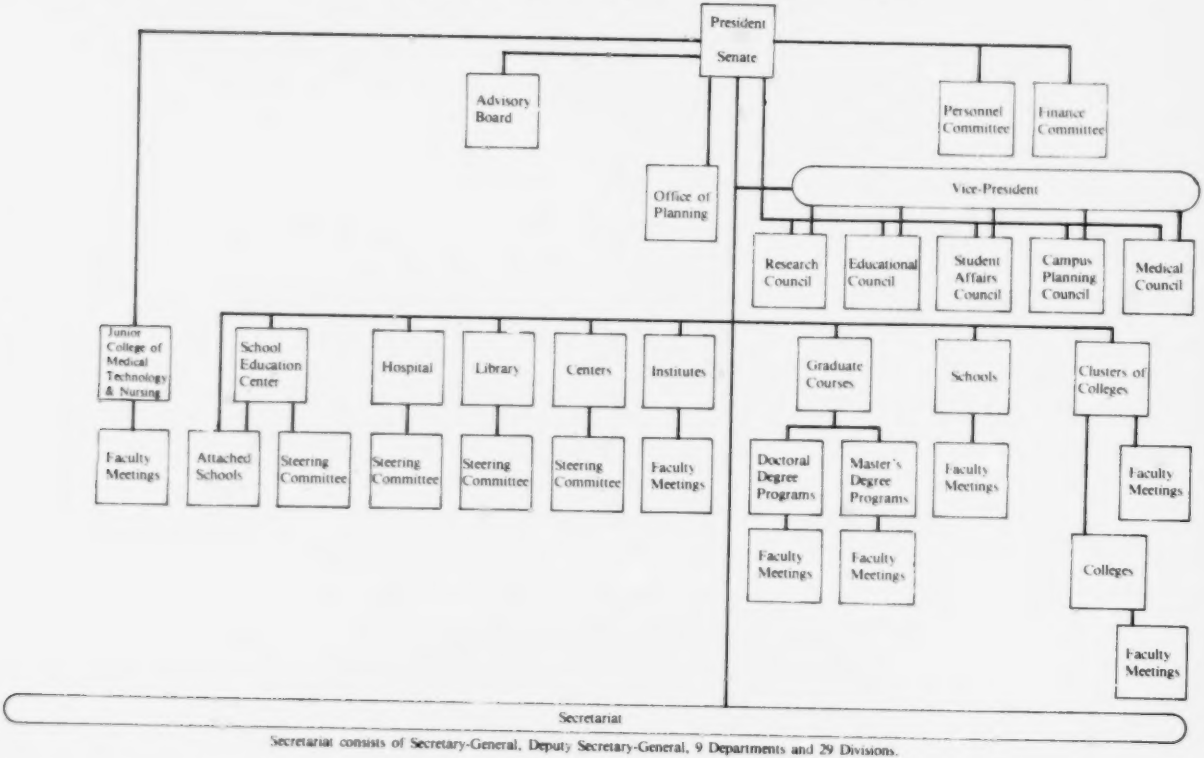


Figure 2. Organization chart of the University of Tsukuba.



Secretariat consists of Secretary-General, Deputy Secretary-General, 9 Departments and 29 Divisions.

BEST COPY AVAILABLE

unit with its own facilities and equipment.

All faculty belong to research divisions. Courses and curricula are planned by a central educational committee and all faculty take part in teaching in the colleges, schools and graduate schools. Planning and co-ordinating undergraduate education and curricula is carried out as shown in Figure 1.

Secondly, at traditional universities administration is carried out within each faculty, however at the University of Tsukuba there is a special vice president and committee which control various academic, financial, personnel and planning functions. See Figure 2. The University also has a committee made of community leaders from the non-university sector to advise the university on its various problems. For future development and projects there is a special educational planning and survey division.

Finally, Tsukuba aims to promote community education with its many extension courses, more than any other Japanese University. As to internationalization, Tsukuba has the second largest number of foreign students of any Japanese university with modern facilities for housing and programs in Japanese as a second language. It has also initiated special admittance for young Japanese who have spent many years abroad and who have difficulty passing rigid entrance exams. There are international exchange programs for faculty members and administration as well.

The structure of the University of Tsukuba influenced new national universities but this impact has not carried over to traditional universities.

Case B-The Technological University of Nagaoka

The Technological University of Nagaoka (T.U.N.) is a new-type technological university established in 1976. The overall structure of the T.U.N. resembles that of Tsukuba but differs from Tsukuba in its special admission policy and focus on technological graduate education. Most students at T.U.N. are graduates of technical colleges (kogyo koto senmon gakko, abbreviated as kosen).

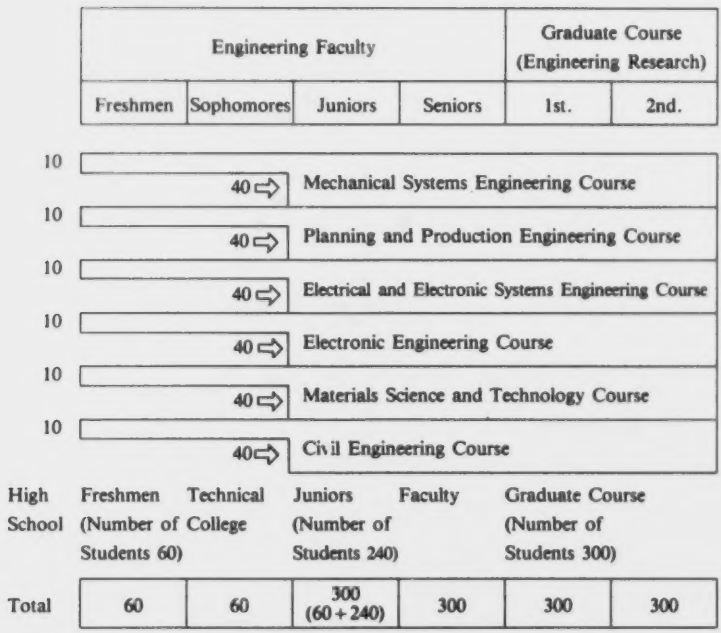
Because the establishment of T.U.N. is closely linked to the kosen, a brief description of the latter is necessary. The Kogyo Koto Senmon Gakko system was started in 1962 to train practical engineers. These schools provide a practical professional type of instruction and accept students who are graduating from Junior High School. The entire program lasts 5 years with graduates having the equivalent of a high school and 2 year college education.

Kosen provide an alternative education to the post W.W.II single-track system. By 1980, 62 kosen had been established all over Japan and out of the 62, 54 were national

colleges. At the beginning of their establishment, they enjoyed a wide popularity and had a very large number of applicants. Most graduates were able to get jobs in big name companies. However with the economic recession of the late 1970's the employment situation changed and applicants to kosen became fewer and fewer. Due to the declining status of the kosen it became more difficult for graduates to transfer into traditional technical or engineering universities to continue their education. Thus in order to aid this situation and revitalize the Kosen system Monbusho established T.U.N. and another institution, the Technological University of Toyohashi.

T.U.N. offers a 4 year undergraduate course and a 2 year masters program. As to the student body, the majority of applicants to T.U.N. are graduates of Kosen as can be seen in Figure 3. They enter as 3rd year (Junior) students and are expected to finish the masters program within 4 years. Graduates of technical high schools (kogyokoko) make up about 20% of the total enrollment of T.U.N. The ratio of graduate students to undergraduate students is quite high (see Figure 3) compared to traditional universities.

Figure 3 Students of the Technological University of Nagaoka



The main purpose of T.U.N. is to educate creative and practical engineers and to help develop young researchers who are flexible enough to do research in newly emerging areas of engineering.

T.U.N. emphasizes the application of skills and 4th year students are required to spend 5 months in private industry or public corporations. Also, in order to develop managerial skills and broaden students' educational experience, management courses and social science courses are required at the graduate level.

T.U.N. and Tsukuba have a similar well defined organizational division of teaching and research. The teaching organization is composed of 6 courses for both undergraduate and graduate levels. There are 5 research divisions each having several sub-divisions or research units (daikoza). Each research unit is designed in order to promote flexibility and encourage communication among various research areas.

T.U.N. puts emphasis on community service via cooperation with local industries. In addition to the required 5 month on-the-job education for students there is a technical consultation office for local industry. T.U.N. has a foundation which supports projects related to university-industry cooperation and community service. An advisory committee of community leaders was set up to give recommendations to the university.

In the area of internationalization, T.U.N. is beginning to take on more foreign students. The prefectural government of Niigata has helped to fund a special program to bring Chinese students to T.U.N.. Faculty exchange programs and foreign guest professors add to the recent attempts at internationalization.

Case Study-C Tokyo Institute of Technology

The Tokyo Institute of Technology (T.I.T.) is the oldest technological institute in Japan. It was established in 1881 as a vocational school and in 1929, was upgraded to university status. At present T.I.T. has faculties of science and engineering, a graduate school of science and engineering and a graduate school for integrated science and technology. There are as well, 4 large research institutes at T.I.T. making it the largest single university of its kind in Japan. In 1949 the course system was introduced replacing the department and chair system, but after some time the course system was abolished and the chair system was re-established. Even with this change there is still faculty independence, with associate professors for example being independent of full professors. This characteristic promotes independent research among young researchers. The limitations of such a structure are that it makes joint large scale research projects within one chair more difficult. In order to compensate for this demerit, a "project-research

system" has been developed.

There are 2 main characteristics of innovation of the educational system at T.I.T.

1) The founding of the integrated graduate school at Nagatsuta
2) Innovation in teaching using educational technology.

In the late 1970's a new campus was built to house the new graduate school at Nagatsuta which provides an integrated graduate education in science and technology. The 4 research institutes (laboratories) are also located here. At Nagatsuta interdisciplinary graduate education is facilitated by special projects between departments and there have been a number of new interdisciplinary courses established. Furthermore the graduate schools are not as strongly linked with the undergraduate programs as in traditional universities and thus students can be accepted from all over Japan. In these new graduate schools faculty do not teach undergraduates, but focus on graduate education and research. This type of graduate school has been a model for several major national universities.

Educational technology has been applied to teaching through linking the separate campuses by a single-mode optical fiber cable which allows for television lectures and also allows faculty to hold joint meetings via television. Using this cable and related technology, distance education, community education and university-industry co-operation will be furthered.

3. Concluding Remarks

The previous case studies not only describe innovations in the new-type university, but also point out the need for future guidelines, especially for adapting to new demands for scientific-technological change and promoting co-operation between industry and society. These new universities are increasingly expected to influence and stimulate reform in the traditional university. The case of T.I.T. is an example of the diffusion of reforms to the traditional sector.

The diversification policy in the introduction reflects a common expectation for changing the structure of higher education.

In summarizing the main points in this paper, the following educational reforms deserve more consideration. It is necessary for traditional universities to make more of an effort to adapt to change through these reforms.

First, inter-university transfer of credits should be mode easier in order to make educational choice more flexible. Although there are already limited opportunities for transfer of credits between some institutions it does not greatly affect the flow of students.

The new University of the Air should provide both new educational opportunities for adults and improve educational choice. If credits from the University of the Air are valid at other universities this should help to promote exchange within university sectors and make educational choice more flexible.

This same expectation can be made for Senshuu Gakko. Acceptance of credits recieved for the special training at these schools such as English language should help in reforming undergraduate education.

The second is that higher education institutions have been requested to cooperate with industry and the community. This cooperation would include providing graduate education for adults and development of science and technology. The universities mentioned in the case studies have a very important role in filling the needs of community and industry.

The Junior College is yet another way to help meet community needs. The recent establishment of Takaoka National College which will begin admitting students from 1986 can help the community by contributing to the development of local industry and promoting local cultural activity. The popularity of the Junior College in Japan is not yet very high among male students but is increasing among women students. Takaoka Junior College is expected to be a model junior college and to help invigorate the Junior College concept in Japan.

The third is the internationalization of the university. Just recently laws have been reformed to allow foreign university teaching staff practically equal status. This is one way of increasing the flow of internationalization. However, the foreign student problem is probably the most pressing. The present situation shows an increase in number of foreign students without a significant increase in attention paid to the problems of foreign students i.e. language, relevance of courses to needs of foreign students, degree granting, housing etc. The University of Tsukuba has actively been working on foreign student problems along these lines. More work is needed at national and private universities. Many Foreign students need a more practical education than can be provided at traditional universities. With some modifications T.U.N. and other such universities could make a great contribution by providing a more practical engineering education to students from developing countries. Not only universities in major industrial cities but also local and smaller universities should cooperate in accepting and educating foreign students and returnee students. The internationalization of Japanese higher education requires a much better level of planning and preparation than at present in order to provide a useful and quality education for foreign students.

WHAT ARE THE MAIN INNOVATIVE FEATURES OF NEW (REFORM) UNIVERSITIES AND OTHER NEW INSTITUTIONS OF HIGHER EDUCATION AND WHAT IS THEIR IMPACT, IF ANY, ON TRADITIONAL INSTITUTIONS?

Leslie Wagner*

Introduction

The major innovation in higher education in the United Kingdom in the last 15 years has been the establishment of the Open University (OU). This paper describes the main features of the OU and analyses the effect it has had on the traditional higher education institutions. The discussion is placed in the context of recent debates on the future of higher education in the UK initiated by the Leverhulme Programme of Study.

The Open University

The Open University was established in 1969 and took its first students in 1971. The idea arose from a belief that there are a large number of adults (aged 21 and over) who are capable of benefiting from higher education but who have missed the opportunity at the traditional point of entry, on leaving the school system around the age of 18. Another important premise of the OU is that it is possible to benefit from higher education without having the formal educational qualifications for entry. So the educational objective and major reform of the Open University is to provide access to higher education for adults without formal qualifications.

A major problem for adults seeking to enter higher education is that family and work commitments make full-time study very difficult, and part-time study dependent on an appropriate course at a nearby location at a convenient time. The Open University adopted modern technology to overcome these difficulties and established a sophisticated distance learning system. Its main components are; correspondence materials, television and radio programmes, class tuition at local study centres and summer schools.

The correspondence materials are at the centre of the learning system taking up

* Professor, National Advisory Body for Local Authority Higher Education, U.K.

the largest proportion of staff time in preparation and student time in learning. In a typical undergraduate course, a package of materials is sent to students regularly throughout the year. This package contains a high-quality course unit text for home study during the prescribed period, supplementary notes offering guidance to the reading of set textbooks, possible additional readings, introductory notes to the scheduled radio and television programmes for that period, self-assignment questions to enable students to monitor their progress during their reading of the course material, and assessment questions, both of multiple-choice and essay type, to be sent away for marking and which count towards the students final grade. In addition, students on science – and technology – oriented courses receive home experimental kits, which as the name implies, include materials which allow students to carry out relevant experiments in their home.

In the early days of the university, all radio and television programmes were transmitted over the BBC national networks and the majority still follow this pattern. Increasingly however, radio programmes are being replaced by audio tapes used by each student on his own home cassette recorder. Video tapes of some television programmes are also available and with the continuing penetration of home video recorders in the UK market, it may not be too long before they become a feasible alternative. While the broadcast materials are the most glamorous element of the teaching package, they take up only about 5 per cent of the students learning time.

The face to face tuition is also a small part of the total system and varies between courses. Its purpose is to provide both personal and academic support to students in their own particular locality through the provision of part-time tutors, usually academics from other institutions, using the facilities of local colleges in the evenings and weekends. In recent years, alternatives to face to face tutorials such as individual and group telephone tutorials have been attempted.

The summer school facility is another aspect of personal tuition but this time concentrated in a week's intensive study on a conventional university campus during the summer months. Not all courses have summer schools, the emphasis being on all foundation courses, those science and technology courses requiring intensive experimental sessions, and arts courses requiring student interaction and participation.

The Open University has been primarily concerned with providing undergraduate education. It has six faculties; arts, social sciences, education, maths, science and technology, although the future of the education faculty has recently been under discussion. Each faculty has a foundation course and a range of second, third and fourth level courses divided into half or full credits. To obtain an ordinary degree, a student

must obtain six credits including two at foundation level. An honours degree requires eight credits of which at least two must be obtained at third or fourth level. Students can combine courses from different faculties providing that, at the higher levels, credits in lower level pre-requisite courses have been obtained. Students with previous educational qualifications are given credit exemptions up to a maximum of three for students with a previous degree. The University also provides for postgraduate study through research and in recent years has developed continuing education through the provision of the shorter single courses in specific subject areas, as well as allowing associate students to take individual courses in the undergraduate programme.

The Experience of the Open University

In its own terms, the Open University is in most respects an undoubted success, as the summary in Table 1 indicates. In the first ten years of its existence, the University has steadily built up its numbers until it now has in excess of 60,000 students per annum, and some 15,000 new students each year. In addition, there are some 8,000 associate students, more than 15,000 students taking continuing education short courses and growing rapidly, and about 700 postgraduate students each year.

Table 1. Open University Statistics 1971-1981

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Applications	43444	35182	32046	35011	52537	52916	49956	45293	42754	45311	43004
Provisionally registered new students	24220	20501	16895	14976	19823	16311	19886	20882	20719	19439	20338
Finally registered new students	19581	15716	12680	11336	14830	12230	14971	15669	14995	14150	14478
Registered continuing students	–	16186	25744	31300	34528	38805	40156	43119	45968	47296	46072
Total registered students	19581	31902	38424	42636	49358	51035	55127	58788	60963	61446	60550

Source: Open University Digest of Statistics 1971-1981

In the ten years from 1972 to 1981 over 50,000 students graduated from the University and the annual rate is now between 6,000 and 7,000. Over two thirds of all students finally registering for a course obtain a credit, the majority of those failing to do so dropping out from the course before the final examination.

The Impact of the Open University

The major innovative features of the Open University are: access, use of education technology, and the award of a degree by credit accumulation. The impact of each of these on traditional institutions will now be examined, both by looking at what happened in these institutions in each of these areas during the 1970's and by studying proposals for the future which have emerged from the Leverhulme Study and other recent reports.

The Leverhulme Programme of Study into the Future of Higher Education was an independent study carried out in the UK between 1981 and 1983 by the Society for Research into Higher Education and financed by the Leverhulme Trust. Its main feature was a series of seminars on various aspects of higher education such as access, teaching and learning, research, finance and structure. Each seminar was based on a series of research papers which summarised the state of knowledge on the subject under discussion and was attended by between 35 and 40 invited participants from higher education and government. There were usually one or two participants from industry and commerce and from overseas. The seminars were chaired by a distinguished industrialist or a senior figure in the higher education world. The papers, together with a summary of the outcome of the discussions at the seminar, were published and these volumes constitute the core of the work of the Leverhulme Study. At the conclusion of the study, a final report was published by the Chairmen of the seminars, amplified by a fuller discussion of the issues in a report by the director and deputy director of the study, Professors Gareth Williams and Tessa Blackstone. A list of all the reports of the study is given in Appendix A.

During the course of 1983, the major bodies responsible for higher educational planning in the UK considered future policy. In June the National Advisory Body for Local Authority Higher Education, recently established to advise on the polytechnics and colleges, issued a discussion document on longer-term strategy. The Council for National Academic Awards (CNAA) which validates degree courses in polytechnics and colleges issued a discussion paper on its future policies at about the same time. In November, the University Grants Committee asked for the response of universities to a series of questions which covered much the same ground.

Access

The opening of access to degree level higher education for adults is the undoubted raison d'être of the Open University.[1] At the time the University was established

the only significant opportunity for adults was through the University of London external degree, and this usually required the formal entry qualifications. A closer examination of the Open University itself indicates that in its own terms it has had only a limited success in attracting those without formal qualifications. In the early years, many of its students were teachers seeking to upgrade their qualifications from certificate to degree, and while this has declined Table 2 indicates that less than 40 per cent of Open University students in 1980 had qualifications which would have prevented their entry to degree level work of traditional institutions of higher education.

By the end of the 1970's the Open University was providing more opportunities for adults to undertake undergraduate study than the whole of the rest of the higher education system, covering universities, polytechnics and colleges.[2] The proportion of adults in the universities declined slightly during the decade while in the polytechnics and the colleges there was some growth, particularly in the latter half of the decade. The central feature of the innovation of the Open University, however, was not just access for adults but access for *unqualified* adults. The only partial success of the Open University itself in this objective, which has already been noted, must be placed in the perspective of the experience of the traditional institutions where there has been very little change. In the universities, almost all the students must have formal entry requirements. In the polytechnics and colleges, there is more flexibility but the evidence is that about five per cent of entrants do not have the formal entry qualifications. There is some evidence of movement in the last few years with the establishment of access courses to provide a route into higher education for unqualified adults.

In recent years, traditional institutions have taken an increasing interest in adult students and indeed have been encouraged to do so by government and other agencies.[3] Invariably, however, the context of the discussion has been the projected decline in the 18 year old population at the end of the decade and the opportunity this provides to serve a wider clientele. Whether this increasing interest in adults arises from a concern with their educational needs or with the survival needs of institutions is a matter of opinion.

Educational Technology

To attract and sustain its clientele the Open University established a distance learning system using modern technology and advanced educational methods informed by an Institute of Educational Technology. As a result, it has gained a world-wide reputation for the sophistication of its learning materials. How far has this influenced

the traditional institutions? There are, in fact, two separate questions. The first refers to the Open University approach. The second refers to the use of Open University materials.

Many traditional institutions have educational development or educational technology units sometimes integrated with and sometimes separate from audio visual departments. In most cases, they were established at about the same time as the Open University. In reality both the Open University and the traditional institutions were simultaneously influenced by the confidence and optimism of the mid 1960's towards the value of higher education in general and the effectiveness of the new media in particular. It is difficult to identify any significant impact of the Open University itself on the attitudes and approach of the traditional institutions in the later period.

The influence of Open University materials is more pervasive. In part, this is due to the fact that many staff in the traditional institutions work as part-time tutors for the Open University and are, therefore, exposed to its materials. A survey of one British university indicated that over 80 per cent of staff had read an Open University correspondence text and over 50 per cent had recommended one or more for occasional use by students on their courses. The figures for the use of broadcast material were much lower.[4)]

Table 2. Open University Students, Level of Highest Educational Qualification Attained, 1980

No. of Students (100%)	14150
No formal educational qualification	8.6%
CSE or GCE 'O' Level or equivalent (i.e. school leaving examination)	24.9
GCE 'A' Level or equivalent in one subject	4.6
GCE 'A' Level or equivalent in two or more subjects or OND/ONC (minimum requirements for entry to traditional institutions)	16.3
Teachers Certificate or equivalent	23.6
HNC/HND or university diploma or equivalent (higher education qualification)	15.0
First degree	6.7
No information	0.2

Source: Open University Digest of Statistics 1971-1981

In general, Open University materials are used as back up to courses in the traditional institutions. They usually form part of a reading list and are seen as one more source of information to students. Occasionally staff will devote all or part of a lecture to the viewing of an Open University programme. This generally is the limit of the penetration of Open University materials into the traditional institutions. There is little evidence of an Open University course en bloc being used in other institutions.

Credit Accumulation

The Open University allows its students a wide choice of courses across a range of subjects building up credits towards the award of a degree, first at ordinary and then at honours level. In contrast, many traditional institutions, particularly universities, offer students entry to a fixed programme of study (with options) in a named subject area with increasing specialisation towards an honours degree. A larger number of polytechnics now offer modular programmes, similar in spirit to the Open University approach, but the three years single or double honours programme is still the norm in much of UK higher education.

Another feature of the system in traditional institutions is that in many cases no credit is given for partially completed studies. A student, who wishes to move to another institution after one or two years of study, often finds that he has to return to the first year. The Open University has concluded credit transfer arrangements between itself and some universities and with the Council for National Academic Awards which validates degree courses in polytechnics and colleges. The story is told of two universities who found it possible to agree to credit transfer arrangements between their own institutions and the Open University, but not between the two institutions themselves. The Government has recently funded a project to establish an Educational Counselling and Credit Transfer Information Service but this move towards greater flexibility for the student is still in its infancy.

Leverhulme

Many of the issues raised by the establishment and experience of the Open University were addressed by the Leverhulme Study. In its final report, access for adults is seen as part of a strategy of wider access "to provide opportunities for all who are able to benefit from some form of higher education ... from a broader social spectrum than at present". A specific proposal which emerged from the seminar devoted to access called for institutions to admit at least 25 per cent of their students using criteria

other than the formal educational requirements. The NAB document raises the question of access of non-traditional groups and the UGC letter to its institutions sees the potential for a substantial development of continuing education. The CNAA in its document refers to the lessons of success of the Open University, and encourages institutions to see how bona fide applicants without normal entry qualifications can be encouraged.

There is little reference in the final Leverhulme Report to the use of educational technology, advanced educational methods or Open University materials. However, a complete seminar was devoted to professionalism and flexibility for learning and the summary of the seminar discussion covers many of these issues. There is specific reference to the impact of the Open University and a call for new styles of teaching and course design more appropriate to adult students. In its consultative document NAB asks whether greater use should be made of distance learning techniques, while the CNAA in its documents raises a number of questions about the objectives of course curricula.

The centrepiece of the Leverhulme Report is the proposal that a two year less specialised pass degree should become the normal first degree qualification in UK higher education. Some (the majority) might leave with this qualification to take up employment. Others might go onto a further year to obtain a more specialist honours degree while yet others might go onto a two year postgraduate qualification. There is no space in this paper to develop the details of these proposals or to summarise the arguments which are presented in their favour. However, it is similar in concept to the ordinary degree which is the core of the Open University system and indeed to which reference is made in the Leverhulme Report. The report also commends more broadly based less specialised degrees which are a feature of the Open University and increasing use of credit transfer arrangements.

Innovation and Tradition

The essential elements of the Open University, particularly those of access and more flexible course structures, feature in contemporary reports on future changes required in higher education in the UK. This itself might be taken as evidence of the relatively little influence these innovations have had on the traditional institutions to date. The evidence presented in this paper shows that while the traditional institutions have moved some way towards the reforms embodied in the Open University, it has been a slow process.

In one sense, this is not surprising. A defender of the traditional institutions might argue that precisely because a separate institution has been established to meet specific objectives, it would be unwise for other institutions to follow. If it is the Open University's task to provide opportunities for unqualified adults there is little sense in the traditional institutions seeking to compete for the same market, particularly as it is one of which they have little experience. Furthermore it can be argued that the Open University's teaching approach, while admirable for its own distance learning needs, is not suited to the campus situation of traditional institutions. Finally, the broadly based credit accumulation degree, while appropriate to the inevitably fragmented nature of Open University study, cannot be applied to the more intensive experience of traditional higher education where the specialised three year honours degree is valued by both students and employers. In this way, the maintenance of traditional forms can be explained.

This, however, begs a fundamental question. Why was it necessary to establish a separate reform institution in the first place? Presumably because of the failure of the traditional institutions to introduce these reforms internally. The forces of inertia and conservatism which required the creation of separate reform institutions also prevent these reforms subsequently permeating the traditional institutions. Indeed the establishment of a separate institution legitimises the traditional institutions and protects them from reform. There is a danger that it will simultaneously devalue the reform.

In the short term it may well be that the most effective method of introducing reform is to establish new institutions. In itself, however, this is an admission of defeat for longer-lasting reform can only come through changing the traditional institutions themselves.

References

1) The university undertook an experiment in the 1970's of making its courses available to younger students. It found that a major problem was that such students experienced difficulty in adjusting to the more isolationist and self-disciplined approach required when using distance-learning materials. The experiment was not extended and the Open University is restricted to those over the age of 21. See A. Woodley and N. McIntosh 'The Door Stood Open'. An Evaluation of the Open University Younger Student Pilot Scheme. Falmer Press (1980).

2) It should be remembered that polytechnics and colleges in particular provide opportunities for higher education at diploma level in vocational subjects for many adults and that universities, through their extramural departments provide diploma studies for adults primarily in non vocational subjects. The focus of this paper, however, is degree level study which is the objective of the Open University.

3) See for example DES Higher Education Into the 1990's. A Discussion Document (1978); DES Future Trends in Higher Education (1979); NAB Towards a Strategy for Local Authority Higher

Education in the Late 1980's and Beyond (1983); UGC Development of a Strategy for higher Education into the 1990's (1983); Goldsmiths College Part-Time First Degrees in Universities Conference Report (1983); CNAA Future Development of CNAA's Academic Policies at Undergraduate Level (1983).

4) G.D. Moss. The Influence of Open University Distance Teaching in Higher Education Teaching at a Distance. No. 14, 1978.

Appendix A

Leverhulme Study Publications

1. *Higher Education and the Labour Market*, ed. R. Lindley.
2. *Access to Higher Education*, ed. O. Fulton.
3. *Agenda for Institutional Change in Higher Education*, ed. L. Wagner.
4. *The Future of Research*, ed. G. Oldham.
5. *The Arts and Higher Education*, ed. K. Robinson.
6. *Professionalism and Flexibility for Learning*, ed. D. Bligh.
7. *Accountability or Freedom for Teachers?*, ed. D. Bligh.
8. *Resources and Higher Education*, ed. A. Morris & J. Sizer.
9. *The Structure and Governance of Higher Education*, ed. M. Shattock.
10. *Response to Adversity*, ed. G. Williams & T. Blackstone.

Final Report: *Excellence in Diversity*.

SUMMARY AND CONCLUSIONS

G.S. Papadopoulos*

The umbrella theme for this two-legged Seminar was "The Changing Functions of Higher Education and Implications for Innovation". The Hiroshima leg focussed on Curriculum and Teaching, while in Tokyo the discussions were articulated around the broader issues of Institutional Innovation and Differentiation. Overlap was both appropriate and inevitable, reflecting the plurality of purposes and functions of higher education systems and the wide diversity of country approaches and experience. It is impossible in this brief report to attempt to unscramble the rich omelette of concepts and empirical analysis to which participants were treated. Therefore, rather than a summary of the discussions, this report will concentrate on some of the main conclusions which emerged at the Seminar, identify the issues underlying these conclusions and point to their implications for policy. In this way, it will help carry forward a discussion which was begun at the first Hiroshima Seminar almost exactly three years ago. In the words of H.G. Wells, "there is no being, but a constant becoming".

Two unifying concerns were discernible throughout the varied and complex issues that were taken up both at Hiroshima and In Tokyo:

a) The fact that change in higher education can only be effective to the extent that it is reflected in the behaviour of the institutions of higher education.
b) Such changed institutional behaviour itself resides essentially in changes in the content and structure of studies and in the organisation of systems and methods of delivery.

This twin reality is accompanied by recognition that the mainspring of change under each of the two categories are different: while changes in institutional behaviour – (a) above – are more amenable to outside interventions, particularly, but not exclusively, on the part of governments and public policy more generally, in the case of (b) – curriculum and teaching methods – responsibility and initiative rest primarily with the institutions themselves, particularly the quality of their leadership and the attitudes of the academic community and of teaching staff.

---

* Deputy Director for Education, OECD/CERI, Paris

But it must also be recognised that both issues are embedded in the broader national traditions – cultural, political and philosophical – which have determined the growth and development of individual systems of higher education and which largely condition the way in which such systems operate and the extent to which they respond to, or resist (as the case may be) the significant changes which have been taking place in the socio-economic environment of all participating countries. Broadly speaking, this is an environment characterised by contraction, coupled with new pressures and expectations, which leads to the diversification of purposes and functions of higher education institutions and, some fear, to a distortion of their essential missions. The prevailing crisis of confidence in higher education, and what many considered to be the inordinate weight of outside pressures on institutions, provided the backcloth to many of the preoccupations that surfaced during the discussions. Recognising the contrast with the past, where expansion had been the main generator of change and reform, the question uppermost in participants' minds was whether the present crisis would be seen as providing a similar challenge to institutions and systems of higher education in galvanising their efforts for creative movement forwards rather than merely adopting a defensive stance.

The U.S. paradigm of tradition and change in higher education provided the starting point for this broad setting for the discussions. Ernest Boyer's quintet of parameters of change – the changing student, the changing length of learning, the changing place of learning, the changing teacher and the changing goals of higher education – were readily seen to apply to other countries as well. To these, the discussion added equally significant changes in the academic profession itself, in the knowledge base and in the balance of control and decision-making, all of which amounted to a major upheaval in the internal lives of higher education institutions.

But limitations to the applicability of the U.S. example to other countries were also recognised. Apart from Japan, other countries had not yet reached the level of mass higher education and their systems were less responsive to market forces and less dependent on private finance than was the case in America. They were also more prone to stability and continuity rather than constant change. New student clienteles were also different, adults rather than ethnic, and higher education institutions were not charged with the remedial functions that characterised many U.S. institutions, and which, particularly in Europe, were assigned to schools. On the whole, the U.S. model was no longer seen as one to be emulated, and there were in fact clear trends in the U.S. itself to borrow from the European tradition, particularly in reinforcing the role

of schools in an attempt to relieve the educational pressures on universities.

The conflicts and strains which emerged from Boyer's presentation were taken up in Arthur Levine's historical overview of the educational mission of the university, with the perennial challenge of fitting the curriculum to the twin goals of intellectual advancement and utility. There was no disagreement with this definition, or in seeing this as a dilemma which calls for constant renegotiation. But problems arose when this was applied to present-day conditions. The definition of "utility" was itself an open question, as was the proper balance between "general" and "vocational" education. In the prevailing conflict about priorities, who decides and who controls the curriculum become vital questions.

The trend towards the professionalisation of higher education courses was seen by many as too facile a response, particularly in view of the uncertainties of the labour market and the rapidly changing skills requirements of many jobs. An instrumentalist response to short-term exigencies might lead to irreparable damage of the longer-term missions of higher education, and of the position of the social sciences and the humanities at a time when, in a technologically-based society, the communication and perceptive skills which they provide will be needed even more than in the past. Participants generally endorsed the need for a redefinition of the curriculum as a whole, not merely accretions to it, towards a new humanism which incorporates scientific and technological culture as an integral part of it. How this is to be achieved is no longer the monopoly of higher education institutions themselves and the setting up of new and effective consultative procedures met with general support.

The need for a re-examination of the educational functions of the university, as it applies to the Japanese situation, was put to the Seminar in forceful terms, in Kitamura's paper, backed by the detailed findings of the Hiroshima research survey, which were presented by Seki and his associates. The survey amounts to a detailed anatomy of higher education in Japan, which is portrayed as a research than an education-oriented system. In spite of occasional glimmers of hope, the picture of the condition of teaching which emerges is indeed gloomy, the system being seen by its major participants as serving the interests of the professors and their disciplines rather than of the students. This was probably generally known already, and the great merit of the survey lies in documenting the situation and in sensitising opinion to it.

This is not the place to describe the results of the survey in detail, or to discuss its methodology, both of which were covered in Lennart Levine's constructive critique. The discussion which followed related the Japanese experience to a number of

general issues, highlighted in Keith Clayton's summary, most of which revolved around the relationship between research and teaching, their balance and reciprocal impact. It was recognised that such relationships apply differently in different institutions and there are also differences among disciplines and branches of study. There was a marked contrast, for example, between the fairly close links which can be established between research and teaching in the natural sciences, whereas such links are often non-existent in the social sciences and the humanities. There was also a tendency for post-graduate work to be concentrated in a relatively small number of institutions, and it was pointed out that in Japan twelve universities receive around 60 per cent of the total volume of research grants.

Employers' attitudes, and employment conditions more generally, have themselves an impact on the teaching and research ethos of universities, particularly within a system of life-long employment commitment, which sets a premium on thorough screening by employers before recruiting university graduates. In the last analysis, it is the attitudes and qualities of the professors themselves which determine a proper balance between research and teaching and the solution lies in improved criteria for the recruitment of faculty members and in providing them with incentives by which they can be encouraged to both teach and remain scholars at the same time.

That not enough attention is paid to their teaching function by universities was recognised as a universal phenomenon, even though in other countries it was not as dramatic as in the case of Japan. The problem could not be dissociated from what goes on within the school system itself and the prevailing systems of examinations and credentialling, dominated by academically determined achievement criteria. Many felt that there was a case for a closer scientific look at the pedagogics of university teaching, as illustrated by the specific example in Peter Posh's exposé of how learning can be activised through more student-centred and learner-defined approaches.

The juxtaposition between the teaching and research functions of universities came up most clearly in Bechem's presentation of the situation in Germany and the discussion which followed. On the one side, there were those who agreed that there is a fundamental conflict between the pursuit of knowledge and responding to student needs and social demand and separate institutional arrangements were necessary to cater for these two distinct functions; universities for academic and select groups of students and other institutions for the rest. Others felt equally strongly that this was an unrealistic way of posing the problem. The combination of teaching and research remains the one distinctive feature of the universities and the question, therefore, was not either

one or the other, but a proper balance between them. It was pointed out that the nature of research itself, and its functions, are changing, with greater prominence being given to the need for inter-disciplinary synthesis and dissemination of research results. But this, again, as so many other aspects taken up during the Hiroshima leg of the Seminar, could not be discussed as generalities, but only in relation to the functions of different institutions within the total system of higher education – which brought us to the discussions in the Tokyo leg of the Seminar based on empirical country approaches at both overall system and institutional levels.

No attempt will be made here to summarise the main features of the very informative presentations that were made by Höllinger (Austria), the two Saitohs (Japan), Ulla Åhgren-Lange (Sweden), and Thompson and Wagner (U.K.). But at least three broad conclusions can be drawn from them and from the discussion that followed:

i) There is a recognised need for functional differentiation among higher education institutions, irrespective of the overall schema of the higher education system, whether binary as in the U.K. or comprehensive as in Sweden. The real problems, therefore, are not in the structure of the system, but within the institutions themselves.

ii) The effectiveness of change policies depends very largely on the degree of clarity with which objectives are stated and the level of policy commitment which is made for the pursuit of these objectives. This is not merely a matter of resources, but also of negotiation processes so as to arrive at a social consensus, particularly important in times of contraction and strain.

iii) The demonstration effect of innovatively conceived institutions is of limited scope, but grass roots initiatives are important in the lives of individual institutions and the value of piecemeal innovation should be recognised. Institutions, therefore, need to be endowed with a sufficient degree of autonomy as a condition for such initiatives to be released.

Underlying all this, was an evident preoccupation about the future role and functions of universities as distinct institutions within higher education systems. This was seen in the context of the growing polarisation of approaches to the planning of higher education, based on a protected sector to ensure the traditional functions associated with universities and on another more open and demand-oriented sector to cater for the needs of new student groups. There was a clear danger that this trend would result in much sharper hierarchies among institutions, reinforced by current patterns of demand for more vocationally relevant courses and institutions. In this situation, a number

of traditional universities, particularly those which are in between the more prestigious institutions and those with a more explicit vocational purpose, will find themselves increasingly vulnerable, as will certain lines of study, particularly in the social sciences and the humanities. The long-term effects of these developments cannot be ignored by current policies for change and innovation in higher education.

PART III

CHANGES IN AMERICAN HIGHER EDUCATION

REFLECTIONS ON AMERICAN HIGHER EDUCATION: EXPANSION AND DECLINE

Ernest L. Boyer*

I am deeply honored to be invited to meet with distinguished colleagues in Japan and to participate in this most important conference. You have asked me to talk about higher education in the United States and in these opening remarks I shall try to highlight important trends. But I am also confident that throughout this seminar I shall receive much more than I shall give and I'm most grateful for this remarkably warm and stimulating session on a topic of great consequence to us all.

American higher education has, in recent years, been buffeted by dramatic change. The number of college-going students has declined. Budgets have been cut. Faculty, eager for promotion, face uncertainty and prospects for many young scholars are not bright. Here are the circumstances that have led to what some have called "the new depression" in American higher education.

I

For over 300 years, higher learning and American society has been intertwined. Education has always been central to the vision of the nation and it is significant that our very first college was established when the little colony on Massachusetts Bay was only six years old. Also, it is significant that, very early, public subsidy was provided. In 1652, the Massachusetts General Court donated land and later authorized special tax levies for Harvard's benefit.

As more colleges were founded – William and Mary in 1693, Yale in 1701, and Princeton in 1751, to name only a few – these institutions began subtly but decisively to shape the nation's future. Their goals were to transmit knowledge that would be useful, not merely in the classical sense of preparing gentlemen, but for the practical demands of a changing world.

* * *

Following the American Revolution, the climate supported national expansion. The

* President, The Carnegie Foundation for the Advancement of Teaching

patriot leader, Dr. Benjamin Rush, wrote: "The business of education has acquired a new complexion by the independence of the country ..." The nation's colleges, he predicted, would be "nurseries of wise and good men to adapt our modes of teaching to the peculiar form of government."

The handwriting was on the wall. America's higher education would be of practical service to the nation. In 1846, the corporation at Yale authorized the creation of a professorship of "agricultural chemistry and animal and vegetable physiology". In 1850, the reform-minded president of Brown University, Francis Wayland, urged his faculty, without success, to build a curriculum that would "benefit all classes". At Harvard, in the same decade, President Edward Everett stressed the institution's role in the service of business and economic prosperity. Harvard took Everett's message to heart. A few years later, when historian Henry Adams asked his students why they had come to Cambridge, the answer he got was unambiguous: "The degree of Harvard College is worth money to me in Chicago".

* * *

In the expansive climate of the nineteenth century, Congress' approved the Morrill Act of 1862, later called the Land Grant College Act. This legislation provided federal land to each of the states to permit them, with the proceeds from its sale, to support not only education in the liberal arts but also training in the skills that would undergird the nation's agricultural and mechanical revolutions.

From Maine to California, a new kind of institution arose. Lawrence Cremin wrote that the land-grant colleges "provided the beginning of a national network of educational research and development institutions that the federal government would subsequently use for a variety of enterprises, from the training of reserve officers for the armed forces, to the reform of agricultural production, to the renovation of rural community life".

Confidence "in every new thing" prevailed. Service became a third important part of American higher education. After visiting Madison in 1909, Lincoln Steffens observed: "In Wisconsin, the university is as close to the intelligent farmer as his pig pen or his tool house; the university laboratories are part of the alert manufacturer's plant ..."

* * *

During the twentieth century, American higher education grew more confident

and, time and time again, the nation turned to the campuses for help. In the 1930s, when our economy was in a shambles, President Franklin D. Roosevelt turned to the academy. He organized something known as the "brain trust" – tapping a pool of talent that only the campuses could provide.

The most obvious service to the nation was university-based research. In 1945 Vannevar Bush, president of M.I.T. and head of the Office of Scientific Research and Development urged a federal commitment to research. He wrote:

> Science, by itself, provides no panacea for individual, social, and economic ills. It can be effective in the national welfare only as a member of a team, whether the conditions be peace or war. But without scientific progress no amount of achievement in other directions can insure our health, prosperity, and security as a nation in the modern world.

The case could not have been more clearly stated. Higher learning and government together had, through scientific collaboration, changed the course of history.

• • •

After the war, for American higher education, a new chapter had begun. Service was now defined as access for more students. Congress passed something called the G.I. Bill. Almost 8 million former World War II servicemen and women benefited from the legislation that brought them into higher education. And in the years to come, younger brothers and sisters, neighborhood friends, nieces and nephews, and eventually, sons and daughters, quite naturally expected to follow in the footsteps of the veterans. Education was available to the many – not just the privileged few.

The expansion of educational opportunity received another boost with the phenomenal growth of community colleges. These unique two-year institutions increased in the 1960s at the rate of about one every two weeks. They offer tuition-free or low-cost education. They enabled many first-time college students to live at home or work part-time during their first two undergraduate years before transferring to a senior institution.

In addition, community colleges trained a host of the nation's youth to enter a surprising array of occupations, ranging from medical assistant to electronics expert to engineering aide, or to take new positions in the burgeoning service industries. They also opened college doors to growing numbers of adults.

* * *

In the 1960s and 1970s, America's schools and colleges assumed a major role in the nation's unfinished business of ending racial discrimination and extending social justice. For millions of additional students, the colleges of the nation provided broadened opportunity.

In reviewing American higher education in service to the nation, we recognize that in earlier days the tasks for higher learning were vastly simpler, student populations were more homogenous, and the expectation of the public more modest than they have been in recent years.

It is also true that progress has not been without interruption. There were times throughout our history when colleges were struggling and ignored, when they were isolated and remained insensitive to social progress.

Still, despite conflicts and inherent tensions, there remains a conviction in the United States that the nation has gained immensely from higher education – and that higher education has profited from the partnership as well. Confidence at colleges and universities has grown precisely at those times when educators were called upon to participate in national crusades of consequence – to expand frontiers, to advance knowledge, to create a better and more just society, and to make the nation more secure.

II

But what about the future? What are the issues today as we seek to be of continuing service to the nation? There are, I feel, five important questions to be faced.

First, we face profound demographic changes in the United States. And the question is this: How can we provide quality education for all the students?

In the United States we still are committed to the notion that people are our most important resource and that the human mind is a terrible thing to waste. Sadly, however, while the number of students enrolled in higher education has expanded the quality has declined. Further, we have not been too successful with minority students in the nation. Looking ahead, this challenge must be faced.

Because of declining birth rates, the number of 18-24 year olds in the United States will drop 23 percent by 1997. This means that fewer young people will be available to do the nation's work. Further, the ethnic and racial composition of young America is changing. While the population as a whole is aging, the youth population among black and Hispanic Americans remains large and will proportionately increase. Today,

slightly more than one-quarter of white Americans are under 18 years of age, but nearly one-half of all Hispanics and over one-third of all blacks fall into this youth category. Clearly, the potential of every young adult must be fully developed, and more, not less, education will be urgently required.

These demographic trends have special significance for the nation's colleges and schools. Since 1970, the proportion of black high school students in New York City has risen from 30 to 40 percent; Hispanic enrollments increased from 21 to 26 percent of the total. In the same period, the percentage of students in Milwaukee high schools who were white dropped from 75 to 34. Changes in the ethnic composition of high schools have been especially dramatic in Miami. In 1970, whites comprised 61 percent of the high school enrollment in that Florida city; today they comprise 36 percent. In 1978, of the twenty largest urban school districts in the United States, 12 had more than 50 percent minority enrollments.

As the black and Hispanic share of the youth cohort is enlarged, education is affected in another way as well. In 1979, only 39 percent of all white households had school-age children. In contrast, nearly half (49 percent) of all black and 61 percent of all Hispanic households had school-age children. With fewer school-age children, white America's commitment to education may well decline. At the same time, minority parents with more young children have a growing stake in education, yet historically they have had limited political and economic power.

Of special concern is the fact that black and Hispanic young people are precisely those with whom most of our nation's colleges and schools have been least successful. In 1979, 80 percent of white nineteen-year olds in the U.S. were high school graduates. However, the same year, 64 percent of black and 60 percent of Hispanic nineteen-year olds held high school diplomas.

If minority students continue to leave school at the current rate, 150,000 additional young people – the equivalent of eleven entering freshman classes at giant Ohio State University – will lose their opportunity for further education by 1990. An increasing proportion of our youth will be condemned to social and economic failure. To avoid such tragic human waste, the rising generation of Americans must be adequately prepared for the world they will inherit.

III

The second major issue relates to the length of education.
How can we provide an education for older citizens – one that continues throughout life?

For most of this century, the American system worked reasonably well for those students who attended. A high school education was considered adequate for all but a small number of professional pursuits. Recently, however, all this has changed. The base of the economy is shifting. Many old jobs have all but disappeared and new ones have emerged. If this society desires higher intellectual and economic productivity, a larger stock of both nonhuman and human capital will be needed and this means not just the youth – but adults as well.

As we look ahead, it seems likely that even 12 years of formal schooling – as a terminal program – will be inadequate for most students. Fifteen years ago, Gunnar Myrdal predicted that by the year 2000: "practically all American youths would demand and obtain not only secondary but also college education of some kind." Myrdal's prediction seems closer to realization today.

From now on, almost all young people will, at some time in their lives, need some form of post-secondary school education if they are to remain economically productive and socially functional in a world whose tasks and tools are becoming increasingly complex.

- Between 1950 and 1979, the proportion of professional and technical workers in the workforce increased from 9 to 16 percent, and the proportion of managers and administrators grew from 9 to 11 percent.
- At the same time, the percentage of blue collar workers decreased from 37 to 33, while farm workers, as a proportion of the labor force, plummeted from 12 to 3 percent. Only in one category – service workers – was there an increase in the jobs in the workforce for which post-high school education might not initially be required.

This trend toward more specialized work is increasing. Employment in the five principal occupations associated with the computer field grew from 765,000 in 1970 to 1,158,000 in 1978 – two and one-half times the overall growth rate in the nation's work force.

There will, of course, continue to be dreary, dead-end jobs. And technology will continue to make some work intellectually less demanding. Indeed, some argue that the new technology may, in fact, be creating a "two-tiered work force" with job training requirements increasing for some workers while decreasing for others. The computational skills once required of the bank teller or the department store clerk, for example, are rapidly being supplanted by scanners and computers.

But when all is said and done, it seems obvious that more education and perhaps a different kind of education, will be needed if a new generation of Americans is to become productively employed and find satisfaction in a world dominated by new, more complicated tools.

The tendency to ignore these realities is alarming. At a time when productivity is being so heavily stressed by our political leaders, the term so often seems to mean simply the output of our factories, mines, forests, and oil wells, as if such output can be divorced from people. The failure adequately to educate – at public expense – a new generation of students, would be a shocking denial of their rights and a fatal undermining of the vital interests of the nation.

The conclusion is clear. American higher learning must redouble its efforts to find flexible ways to provide for lifelong learning.

IV

The third challenge follows from the last.

How can we build an education system that emphasizes not just tradition – but creativity as well?

In America we're now talking about the "reindustrialization" of the nation – the need to to create jobs and to compete internationally. We talk a lot about high-tech industries, computers and robots, management systems, and sales techniques – education as technical training.

Oddly – in the presence of all of this – we also hear talk of training technologists. While there is surely a need for more and better scientific and technical education, the harsh truth is that "creativity" may call for a more open, less technical education. One that emphasizes not conformity but independence.

We now have at The Carnegie Foundation a task force headed by Frank Newman to work on this concern. The basic question of the Carnegie project in Education and Creativity is this: Can we educate our students to take risks? Risk taking is, we feel, increasingly essential for regeneration and renewal not just of the economy but for society also.

In the national debate about education the word productivity is used. This is really a way of saying;

- We, as a country, must get going.
- We must be more imaginative, more effective in our management of industry.

We are beginning to acknowledge that our educational system may have been educating excessively toward dependency, toward the avoidance of risk. Indeed the education of professionals – lawyers, MD's, MBA's – is increasingly criticized not only because it is rigid and stultifying but also because it often teaches students to "play it safe", to resist change. The huge increase in the number of lawyers and in the amount of litigation may in fact contribute to our unwillingness to take risk.

What then should be higher learning's service to the nation? Looking ahead, I believe the university will serve the nation well when it develops in the person the ability to think independently and analytically; to encourage risk taking, and creativity. The task of colleges and universities is to encourage these essential traits. Independence and creativity have always been the urgent task of education, but the issue is made more obvious today because of our rapidly changing, complicated world.

V

The fourth question higher education confronts also brings me back to a theme discussed at the opening of this conference: How can the university, in its service to the nation, build links to other institutions?

Historically, American universities have worked in isolation. They remained aloof from schools, from the government, from industry and business. There is now a growing conviction that new networks must be established if the nation is to be well served.

Schooling in America is in serious trouble; and higher education has a responsibility to help solve the crisis it has, through neglect and inadvertence, helped create. We cannot have quality in our colleges if during the twelve preceding years of formal education the teaching is inadequate and the curriculum lacks coherence.

- Schools and colleges should once again give top priority to the effective use of language; and all students, during the first crucial years of formal education, must learn to read and write and compute with skill. These are the fundamentals for all future learning.
- A rigorous and balanced core curriculum must be developed through which students at both the school and the college levels learn about their heritage, the natural world, and the social and technological environment in which they live.
- Students in the upper years of high school should be given the opportunity to test their aptitudes and devote a portion of their programs to a special interest field.

- Above all, colleges must recognize the centrality of teaching. The quality of teachers recruited for the nation's classrooms must improve. Teacher training programs must be dramatically overhauled, and the rewards of teaching – not only salaries but social recognition – must be greatly enhanced.

There are not panaceas, to be sure. Still, rebuilding quality in education is an urgent matter, since the real problem confronts not schools so much as students whose lives will be shaped by the programs we provide. "In every child who is born ... ," James Agee once wrote, "the potentiality of the human race is born again." Educating a new generation of Americans to their full potential is higher learning's most compelling obligation.

VI

The fifth and final issue we confront is this:

How will technology be used to serve the nation? Will we shift from traditional classrooms and let electronic teachers do the job?

The "computer craze" is now sweeping over education is the United States. Several universities now require every new student to have his own computer. And "computer literacy" has become a priority for almost every school.

Further, we are experimenting once again with television colleges (modeled somewhat after the Open University in Great Britain) that will permit students to do their work at home. Some observers now predict that before this century is over traditional campuses will be obsolete.

There is no question that we have entered a technology revolution and there is no turning back. Can we combine the "traditional" and "non-traditional" teachers in the future.

In the summer of 1938, the essayist and novelist E.B. White sat in a darkened room and watched transfixed as a big electronic box began project eerie, shimmering images into the world. It was his first introduction to something called TV. E.B. White – who not only wrote Charlotte's Web, but also co-authored that great manual of clear communication *The Elements of Style* – said:

> I believe television is going to be the test of the modern world, and that in this new opportunity to see beyond the range of our vision we shall discover either a new and unbearable disturbance of the general peace, or a saving radiance in the sky. We shall stand or fall by television – of that I am quite sure.

Whether the new electronic teachers, from TV to the computer, become a "saving radiance" in education or remain an "unbearable disturbance" will depend on whether we have learned the lesson of the past. It will also depend on whether programs are well prepared, whether teachers are made partners in the process, and, above all, whether schools have an education plan before they purchase equipment.

The challenge is not to view technology as the enemy; nor is it to convert the school into a video-game factory, competing with the local shopping center. Rather, the challenge is to build a partnership between traditional and nontraditional education, letting each do what it can do best.

The potential of technology is to free teachers from the rigidity of the syllabus and tap the imaginations of both teacher and student to an extent that has never been possible before. Today, teachers and school librarians can capture instructional materials – films, video cassettes, computer programs – and fit them appropriately into the curriculum. Such programs can help students study on their own.

In the long run, electronic teachers may provide exchanges of information, ideas, and experiences more effectively (certainly differently) than the traditional classroom or the teacher. The promise of the new technologies is to enrich the study of literature, science, mathematics, and the arts through words, pictures, and auditory messages. To achieve this goal, technology must be linked to school objectives.

Television can take students to the moon and to the bottom of the sea. Calculators can solve problems faster than the human brain. And computers can instantly retrieve millions of information bits. Word processors can help students write and edit. And the classroom of the future can be a place where the New York Philharmonic comes live from Lincoln Center.

But television, calculators, word processors, and computers cannot make value judgments. They cannot teach students wisdom. That is the mission of the teacher, and the classroom must also be a place where the switches are turned off.

Above all, the classroom should be a place where students are helped to put their own lives in perspective, to sort out the bad from the good, the shoddy from that which is elegant and enduring. For this we need teachers, not computers.

Two additional caveats should be mentioned. In recent years public confidence in education has declined. At the same time the morale among the faculty has declined as well. This is a dangerous combination. It means that the higher education is least capable of solving its own problems at a time when difficult choices must be made. Without strong leadership within the university public support for education will continue

to go down and outside interference will increase.

The question we confront is this: Can higher education make difficult decisions and control its own destiny during a decade of decline?

Conclusion

Universities in the United States have historically been of service to the nation. While remaining independent they have provided for the education of larger and larger numbers of our children. They have been the primary centers of research and they have provided technical assistance to our farmers, to government and to business, too.

But there is a growing feeling that in the future a new agenda will be faced and new strategies will be needed.

First, to be of service we must find ways to better educated minorities who in the past have failed but who will increasingly populate our schools. Developing human resources in our most essential challenge.

Second, to be of service we must build educational arrangements for people to be educated throughout life.

We need new programs, in new places, with new schedules. Flexibility – not rigidity – is essential.

Third, we must find ways to develop creativity and imagination in our students so that we have a proper balance between continuity and change.

Fourth, we must find ways for higher education to become a more "connected" institution – linking its resources to industry and schools without compromising the integrity that is essential for free and independent thought.

Fifth, we must find ways to use technology – using more effectively the informed teachers that will increasingly shape education in the future.

Sixth, we must find ways to rebuild confidence beyond the campus and involve the faculty more vitally in shaping the future of higher education.

In the end, education's primary mission is to develop within each student the capacity to judge wisely in matters of life and conduct. This imperative does not replace the need for rigorous study in the disciplines, but neither must specialization become an excuse to suspend judgment or interfere with the search for worthwhile goals.

This is not to suggest a program of indoctrination in place of investigation; it is not a prescription for a rigid code of conduct for all students. We need no cultural or moral bandmasters striking up the tune to which everyone must dance. Indeed, we view with grave concern the growth of censorship and repression and the crusades of

righteous zealots who seek to impose on others their own brand of morality. To counter such narrow and reactionary thinking, colleges should not push for particular conclusions; rather they should create a climate in which the values of the individual and the ethical and moral choices confronting society can be thoughtfully examined.

The aim is not only to prepare the young for productive careers, but to enable them to live lives of dignity and purpose; not only to generate new knowledge, but to channel that knowledge to humane ends; not merely to increase participation at the polls, but to help shape a citizenry that can weigh decisions wisely and more effectively promote the public good.

* * *

Again, my profound thanks for this seminar on higher learning. I do hope that our connection will continue as we seek to strengthen higher education and our nations and as we continue to build warmth and friendships that have made this conference a memorable occasion.

AMERICAN EDUCATION: HOPE AMID CHANGE

Ernest L. Boyer*

I am deeply honored to be invited to meet with distinguished colleagues in Japan and to participate in this most important conference. You have asked me to talk about higher education in the United States and in these opening remarks I shall try to highlight important trends. But I am also confident that throughout this seminar I shall receive much more than I shall give and I'm most grateful for this remarkably warm and stimulating session on a topic of great consequence to us all.

I

Adlai Stevenson made famous the phrase – "a revolution in expectation." It is still an apt phrase for what happened in the United States during the golden years of higher education.

The years between 1955 and 1974 were indeed a "golden age" for higher education in the United States. During these two decades;

- The number of students tripled (from 2.5 million in 1955 to 8.8 million in 1974).
- The percentage of 18 to 24 year-olds enrolled for degrees nearly doubled (from 17.8 percent in 1955 to 33.5 percent in 1974).
- The number of black students showed an eightfold increase (from an estimated 95,000 in 1955 to 814,000 in 1974).
- The proportion of young women in higher education rose from one-third to one-half of all those attending college.
- Physical facilities nearly doubled from 1955-1974. And more college buildings were erected in those two decades than in the prior 200 years.
- Faculty members increased from 266,000 in 1955 to 633,000 in 1974.
- University research in 1955, was funded at the level of 312 million. By 1974 that sum was up to $3 billion – a ten-fold increase.
- In 1955, the federal government financed 55 percent of the university-based research, by 1974 it was financing 64 percent of that work. (Support from

* President, the Carnegie Foundation for the Advancement of Teaching

foundations increased 500 percent in the first decade, 1955-1964 and giving from alumni and business corporations doubled.)

II

American higher education has, in recent years, been buffetted by dramatic change. The number of college-going students has declined. Budgets have been cut. Faculty eager for promotion face uncertainty and prospects for many young scholars are not bright. And buildings that were built during the explosive decades of the 50's and 60's often are underused.

Like all great revolutions this peak period in American higher education has become the benchmark by which comparisons are made. And many of these comparisons are discouraging – especially to administrators who are caught up in what's been called "the management of decline," and by faculty who see their future dimmed.

- Today we no longer hear about "master planning" in the United States. Rather, "accountability," and "retrenchment," have became familiar words. And successful management seems to have become more important than quality education.
- Today we have a one-fourth drop in the number of 18 year olds in the United States (1978-1994) – a staggering prospect for an institution with 12 million enrollees (1982).
- Double digit inflation in the late 1970's brought rapid increases not only in fuel bills but in educational and scientific equipment, in labor costs, in library books and periodicals.
- This period of retrenchment has been especially powerful for faculty at America's higher learning institutions. The tenure squeeze has meant that many institutions now have 75 percent of their faculty members in tenured positions. The number of law suits rose as did the cost of legal services.
- One of the most serious issues we have to confront is the loss of opportunity for young professors and the loss of a generation of young scholars. Not only have the total pool of graduate students declined but increasingly our gifted students are choosing medicine, engineering and law rather than humanities and social sciences.

The national press has reported that at one university the news of an oversupply of Ph.D.'s and a shortage of positions is resulting in a drastic change. Nowadays, seniors, a bit wistfully, seem to have concluded that graduate work and college teaching are a cul-de-sac. And off they go to schools of law, medicine, or business, where, chances

are, they will number among their professional school classmates some of the junior faculty under whom they have been working in college, who have also been forced to give up on a career in scholarship.

III

But there is also a silver lining to the dark cloud of retrenchment that now hangs over much of higher education in the United States. Let me give three examples to illustrate the point.

First, the declining population among traditional students has opened up opportunities to serve older students. Indeed one of the most dramatic – and more hopeful – trends in American higher education is the move toward lifelong education.

- In 1972, for example, 9 percent of all college students were 35 years and older. By 1980, 12 percent of the college population were in this age group.
- Overall the median age of college students rose from 20.6 years in 1968, to 21.6 years in 1973, and to 22.4 by 1981.

Another important and related trend is the shift from full-time to part-time attendance in higher education.

- In 1970, there were 1.2 million part time undergraduate students in the United States – 20 percent of such students.
- By 1975, part-time population had increased to 26 percent and by 1982 it was up to 34 percent.

This pattern is expected to continue. Part-time students are projected to reach 4.6 million in number by 1985 – or 44 percent of total undergraduate enrollment. By 2000, almost 47 percent of the projected undergraduate population is estimated to attend college part-time. With the move toward adult and part-time students new kinds of non-traditional institutions are emerging.

IV

There is still another bright spot amidst the clouds. New kinds of institutions have emerged to serve new students. One of the most interesting new institutions is the two-year institution we call the community college. It is wedged between the secondary school and the traditional four-year college – and it has become our most popular post-secondary institution.

- In 1955, there were about 400 community colleges enrolling 325,000 students. In 1974, 973 such colleges enrolled 3.4 million students. In those 20 years, a new

community college was opened every two weeks. Of the persons going to institutions of higher education, 40 percent were, by 1974, in the two-year institution.

- Between 1946 and 1970 two-year institutions attracted less than 20 percent of all enrollments.
- Today these institutions have become increasingly popular – especially among Hispanic students – and today two-year college enrollments have a 52 percent share of total enrollment. The community college is the only growing segment in higher education.

The emphasis of the community college increasingly is on *community*, not *college*, making the college into a center of educational services.

Transfer rates of community college students vary widely from state to state. In 1979, their rates ranged from 4 percent in California to 30 percent in Minnesota.

Still, the transfer trend is down. There is, in fact, something called the "reverse transfer" phenomenon, where students previously attending four-year institutions transfer to two-year colleges.

- In 1979, approximately 15 percent (3,500) of all students in Illinois who transferred that year left four-year universities in Illinois to matriculate at Illinois community colleges.
- Also in 1979, more students transferred from the University of California to California community colleges than students leaving these community colleges to relocate in the University of California system.

There are other institutions, too. In the State University of New York, for example, we launched Empire State College – an institution without a campus where students design a special curriculum study on their own, and work closely with mentors at "learning centers" across the state.

V

The so-called "period of decline" has also stirred a fresh debate in the United States about what colleges should teach. One side argues that the traditional college curriculum – with its emphasis on general education – is doomed. On the other side are those who argue that Careerism and professional study have pressed further and further into the colleges and schools – and there is, they say, no turning back. And the evidence is impressive.

- Such fields as English, history, the fine arts, and education – which were at one time strongholds for degree candidates – have been displaceds by such fields as

chemical and electrical engineering, computer science, business management, or a technical-program in building and mechanical trades.

- For example, the proportion of freshmen who reported either fine arts or history as a probable major has declined by 71 and 65 percent since 1973. During the same period, freshmen who had selected engineering as a major field increased by 84 percent.
- Since 1978, the proportion of freshmen intending to major in computer science and data processing has increased by 206 and 139 percent respectively to nearly one in every five students. Technical degree programs during the same period have increased in popularity by 39 percent from 7 percent of all major fields of study to nearly 10 percent today.
- Fields of study which have lost student interest are education and English. Since 1973, the percent of all freshmen planning to major in these disciplines has declined by 54 and 40 percent respectively.

But there is a rather countervailing movement in America – one supportive of the more traditional "general" education. This might be called an "antispecialization" movement – a noticeable yearning for coherence – a move away from early specialization, a rejection of compartmentalization of the student and fragmentation of the curriculum.

At the precollegiate level, the National Commission on Excellence in Education has promoted a tightening of "general" requirements for all students. In our own report, called *High School,* we recommend that the secondary school core requirements be increased from one-half to three fourths of the students total time. The course of study should include more time for language, math, civics, history and the arts. State after state, district after district, are accepting the recommendations and stiffening the academic core.

The debate about the college curriculum is more vigorous in the United States than at any time since publication in 1945 of the so-called Harvard "Redbook" and, later, David Bell's *The Reforming of General Education.*

In 1981, at the Carnegie Foundation, Arthur Levine and I wrote a little book entitled *Quest for Common Learning.* We summarized the history of general education in American higher education and outlined a suggested common core.

In that essay we say that general education should concern itself with those shared experiences without which human relationships are diminished, common bonds are weakened, and the quality of life is reduced. We argue that the curriculum should focus

on human interdependence, those connections where the needs and interests of the human family intersect. In short, general education, we say, should concentrate "on those experiences that knit isolated individuals into a community."

In our essay we identify six broad themes that are the proper concern of general education:

Shared use of symbols
Membership in groups and institutions
Producing and consuming
Relationship with nature
Sense of time
Values and beliefs

Ironically, this curriculum debate has moved to graduate education, too. In December, 1983, at a national Colloquium on Graduate Education in Princeton, Jaroslav Pelikan, Sterling Professor of History at Yale, called for cross-disciplinary programs of study in the graduate school. In biochemistry and elsewhere in the natural and physical sciences there are examples of connections.

Anthropologist Clifford Geertz of the Institute for Advanced Study at Princeton has gone so far as to describe these shifts in the world of scholarship as "an important change in the way we think about the way we think." This is reflected, Geertz says:

> ... in philosophical inquiries that look like literary criticism (think of Stanley Cavell on Beckett or Thoreau, Sartre on Flaubert), scientific discussions that look like belles lettres morceaux (Lewis Thomas, Loren Eisley), baroque fantasies presented as straight forward empirical observations (Borges, Barthelme), or histories that consist of equations and tables or law court testimony (Fogel and Engerman, Le Roi Ladurie), documentaries that read like true confessions (Mailer), parables posing as ethnographics (Castenada), theoretical treatise set out as travelogues (Levi-Strauss), ideological arguments cast as historiographical inquiries (Edward Said), epistemological studies constructed like political tracts (Paul Feyerabend), methodological polemics got up as personal memoirs (James Watson).

The wall dividing the two cultures – scientific and humane – is still standing, but it is being continuously breached; the pattern of intellectual investigation is being rearranged. More than at any time in our memory, researchers feel the need to communicate with colleagues in other fields. And this epistemological change may have

profound impact on the future of general education. As new investigative links are drawn, scholars at all levels will – of necessity – make new connections between their own disciplines and the disciplines of others. A more integrated view of knowledge and a focus on the large questions in our teaching and research will create, we believe, a climate favorable to general education in the nation's colleges and schools.

Nearly forty years ago in Liberal Education, Mark Van Doren wrote:

> The connectedness of things is what the educator contemplates to the limit of his capacity. No human capacity is great enough to permit a vision of the world as simple, but if the educator does not aim at the vision no one else will, and the consequences are dire when no one does ... The student who can begin early in life to think of things as connected, even if he revises his view with every succeeding year, has begun the life of learning.

Seeing "the connectedness of things" is, we conclude, the goal of common learning.

VI

Finally, as colleges face constraint they have to begin to focus attention on the quality of education in the lower schools. Today, Americans are alarmed about the basic education of our students (often comparing their performance unfavorably with those in Japan) and as I have just mentioned widespread reforms are now occurring.

In response, a remarkable new trend is occurring in American education. School and university people are talking to each other. Projects emphasizing the seamless web of education have been cropping up from coast to coast.

Syracuse University in New York is now offering college courses in high school classrooms. Youngsters who successfully complete such a course are guaranteed credits from Syracuse and are considered as entitled to a transcript as a student who has studied on the campus.

Seventy-five high schools in four states are participating in the Syracuse program. In six different subjects, ranging from biology to sociology, the program uses the same material and the same tests given to freshmen in the introductory courses on the campus. Research comparing the performance of students who take the courses in secondary schools with those who take them at the university shows very similar achievement.

Other higher learning institutions bring high school students onto their campuses. At the University of California at Berkeley there is a program aimed at seniors who have demonstrated their potential for doing college-level work. The students spend part of the day at their high school where they remain officially enrolled, but they are allowed

to take a maximum of two courses per quarter at the university. Although younger than their classmates, these students are expected to do the same work as the others in the course and are graded on the same basis. The course work may be applied towards a degree carried at Berkeley, if it is there they enroll, or transferred for credit at another university or college.

Among the most extraordinary efforts to reach out to students at the precollege level is a program at Johns Hopkins University in Baltimore, Maryland. It began in 1971 with the efforts of Julian C. Stanly, a psychology professor at Hopkins, to identify young mathematical geniuses. He wanted to create a program which allowed students talented in this field to work closer to their capacities than the traditional secondary school curriculum permitted.

Courses on the university campus are made fully available to students chosen for the program. As a result, most race through their high school curriculum. A few have skipped it altogether, entering the university at ages 16, 15 or even younger. It is not unheard of for some of these to be doctoral candidates by the age of twenty.

Middle College of La Guardia Community College in Long Island City, New York serves students who might not otherwise regard college as an option. It is two schools at once – a high school and a college which share the same building. Those there as high school students are encouraged to attend the classes at the college, carrying credits for their work. Eighty-five percent of those graduates go on to college. These are examples of one form of connection between high school and colleges.

In a recent survey, the Carnegie Foundation for the Advancement of Teaching identified 260 similar programs which allowed students to enroll in college-level courses before they finished high school. An estimated 28,000 students are served. The success of these programs are encouraging others to form.

Connections are also being formed between high school and college teachers. One example is a Teachers' Institute formed in 1978 which allows high school teachers in New Haven, Connecticut to study with senior professors of Yale University. Eighty percent of the city's teachers now participate in the program. A recent study revealed that for almost half of these, participation in the program became an important factor in their decision to remain school teachers in New Haven.

A program that began at the University of Michigan in 1978 helps the schools in a different way. It is an outreach program designed to help high school teachers throughout Michigan – teachers of all subjects – to train their students to be better writers. In this case Michigan, unlike Yale, eventually enrolls many of the students

affected by the program.

Michigan's program has proved so popular that those involved are beginning to set up similar projects in the high schools of other states. The Yale-New Haven Teachers' Institute has had such success that it is now well funded. These and similar programs work because they are meeting a deeply felt need of this nations' teachers for the kind of help that will both enliven and improve their teaching.

Other examples of collaboration between schools and colleges reflect the unique qualities of the separate institutions involved. Queen's College and Louis Armstrong Middle School are both in an area of wide ethnic diversity, twenty minutes by subway from New York City's Time Square. The middle school teaches children from ages 10 to 14 and yet students and professors from Queens College are active participants. Student teachers have set up a program which permits children to arrive at school 45 minutes before the regular schedule begins for sports and crafts. The school has established a museum, maintained by the students and the College has helped with that as it has also with a guidance program for parents and other members of the community which provides counselling and adult education. And as with other programs, teachers at the middle school are encouraged to continue their education by taking courses at Queen's college without charge.

Finally, schools and colleges are coming together to clarify and strengthen academic standards. Educators at both level are asking: What is the core of common learning? And colleges are taking the lead in specifically defining the curriculum for students who go on to higher education. The University of Utah went so far as to run a full page advertisement in the *Salt Lake Utah Tribune* which listed a recommended course of study in secondary school that purportedly would increase chances for success at the institution.

There is a growing conviction that education involves many relationships at many different levels, and, that all of the linkages must be strong. If they are not, the chain will snap and the nation will suffer an unbearable loss.

What's emerging is a less smug, more honest, more open approach to education with educators acknowledging their obligation to achieve quality for all students. They are affirming the vision of one of our contemporary poets – James Agee who wrote:

> For every child who is born, no matter what circumstance, the partnership of this known race is born again.

Conclusion

This then is the picture of American higher education. It is as Charles Dickens

put it long ago, the best and worst of times.

For two decades higher education in the United States dramatically expanded. And then the picture changed. Many institutions started to decline.

But there are hopeful signs that may be of interest to our colleagues in Japan.

- We discovered that older students need education, too.
- We discovered that education can be intermittent – with students in and out of school.
- We discovered that non-traditional colleges also can offer a quality education.
- We discovered that education must be both unusual and practical.
- And we discovered that education is a seamless web – what happens in the lower schools surely will shape the future of higher education.

These are important lessons to be learned and I'm confident that education during a period of constraint can be vital if we are flexible and focus not on buildings and bureaucratic procedures but on the people to be served.

American higher education has never been a static institution. For more than 350 years, it has shaped its program in response to the changing social context. As we look to a world whose contours remain obscure, the time has come for higher learning to adjust, once again, its traditional roles of teaching, research, and service. In so doing, it should affirm that at the heart of the academic enterprise there is something more than the heating system or the common grievance over parking.

SECONDARY EDUCATION IN AMERICA: PRIORITIES FOR REFORM

Ernest L. Boyer*

Introduction

I have been asked to talk about secondary education in the United States, since we are having there – as you know – a remarkable debate about the quality of public education. During the past twelve months a wave of school reports has swept across the nation and even the President of the United States is giving education speeches. The most startling report was entitled "A Nation at Risk" prepared by a National Committee on Excellence in Education.

Governors in the separate states and corporate leaders are pushing for excellence in education and we now have the best opportunity we will have in this century to improve the nation's schools. It is especially significant the school is beginning to effect higher education, too. There is a growing recognition that education is a "seamless web" and that it is impossible to have excellent universities if we do not have excellence in the schools. Therefore, my remarks on secondary education relate directly to the OECD higher education seminar we have just concluded.

As a part of the debate about the quality of secondary education, the Carnegie Foundation for the Advancement of Teaching recently released its own report entitled, *High School.* We spent over 2,000 hours in schools from coast to coast and we gave a mixed report card to secondary education. We concluded that a small percentage of high school students in the United States – 10 to 15 percent perhaps – are getting an outstanding education – the best anywhere in the world. We also concluded that for a larger percentage of our students – 20 to 30 percent, perhaps – schooling is a failure. Indeed, in 1981 almost one out of four high school students were dropping out. This is a staggering waste of human talent.

Finally, we concluded that most American students are attending schools where pockets of excellence can be found but where also there is insufficient intellectual challenge. Therefore, while we praise public education in America for its remarkable achievements, we also conclude that today the report card on our schools is

* President, the Carnegie Foundation for the Advancement of Teaching, U.S.A.

unacceptable – C' perhaps. And our study we present 12 key proposals for school improvement.

This afternoon I should like to focus briefly on six of these reforms and then I shall welcome your comments and suggestions.

I

First, we recommend that the American high school clarify its goals.

As we went from school to school we found remarkable confusion about what secondary education the United States is seeking to accomplish. In America, we have 50 separate state education agencies and over 16,000 school districts. Each one of these legal entities has its own unique ideas about what the schools should be trying to accomplish.

In California, for example, the state law says that all students should be taught kindness to animals. The state of Maine requires that all students be taught "morality" – for at least 1/2 hour every week. And in Wisconsin, all students must be taught the true "nutritional" value and "vitamin content" of dairy products. (Wisconsin, as you know, is called the dairy capital of the nation.)

More serious is the fact that recently high schools have been asked to take on the burdens of the home. The number of children in America affected by divorce has more than doubled since 1960. About half the children now in first grade will live in a "one-parent" home by the time they graduate from high school. During our school visits one teacher told us: "We are no longer expected just to teach the subjects, we are expected to be psychiatrists as well." This means that parents are often less supportive of the school.

Finally, American high school goals have been confused because we track students into so-called academic and vocational programs. This is simply a way of dividing the "winners" and the "losers". In our study we found that vocational students are not prepared for work nor are they prepared for further education.

In response to all of this we proposed in the Carnegie Report that the high school must be an academic institution, not a clinic. And, there must be more support from the home. While in Japan parental pressure is, I understand, intense, in the United States frequently it is almost non-existent.

We also proposed "one track" for all students – one that helps all students become proficient in the use of language; gives all students a core of common knowledge; introduces all students to both work and further education through a program of electives; and prepares all students for civic responsibility and life in society.

What we argued, in short, is that each high school have a clear and vital mission

– one that provides a solid academic program before the student moves on in higher education.

II

Second, to achieve excellence, we propose that all high schools give priority to language.

The National Commission on Excellence in Education called for more Math and Science in the public schools. But in the Carnegie Report we conclude that language is the most essential tool of education. We say that it is through language that all other learning is accomplished. Morton Bloomfield, writing in Daedalus says that "Language – to a large extent – defines our very humanity and we cannot escape it even by our silence."

We also have stated, in the Carnegie Report, that writing is our most important and most neglected language skill. It is through clear writing that clear thinking can be taught. We found that our students quite literally can go for years without having their writing carefully critiqued or, worse, without having written anything at all.

To help students with their language, 5 specific recommendations were submitted in the Carnegie Report.

- First, we recommended that the first 3 years of formal schooling be devoted primarily to the teaching of linguistic skills.
- Second, we recommended that a Language Entrance Examination be administered to all students at the time they enter high school.
- Third, we recommended that a course in writing be the first requirement in high school for all students.
- Fourth, we recommended that all prospective teachers take a course on how writing should be taught.
- Fifth, we recommended that all students complete a senior thesis before they be allowed to graduate from secondary education

Here then is our conclusion: The mark of an educated person is not recalling facts or completing Carnegie units but having the ability to think clearly and to communicate with care. The effective use of language is, we say, the first and most essential goal of education – both secondary and higher education

III

Third, we proposed a core of common learning for all students.

The harsh truth is that for most of this century we have had no concensus in American schools about what it means to be an educated person. Following the tradition of Rousseau we have argued that method is as important as the content. In more recent years we have been more concerned about expanding access for all students without asking: Access to what? And without a "vision of education" the school curriculum has just sprawled. The state of Illinois, for example, has over 2,000 separate high school courses.

During our school visits one principal said:

> "Sure we have 'a smorgasbord' of electives, but it's essential. Our students range from National Merit Scholars to kids who can hardly read and write. It's just crazy to think that one curriculum can serve them all."

Today in America we are beginning to recognize the simple truth that what is taught is what is learned. And at both the school and college level we are proposing a core curriculum for all students. In the Carnegie Report we suggested that 2/3 of the high school curriculum be required. In addition to strengthening the traditional courses in literature, history, math and science, we also emphasized foreign language, the arts, civics, non-western studies, technoiogy, the meaning of work, and the importance of health.

We say that to be prepared to live in our interdependent, complex world, students must be well informed. They also must have the ability to bring together information from across the disciplines, to organize their thoughts and reach conclusions, and, in the end, use knowledge wisely. To prepare all students as citizens we must have a core of education. This cannot be postponed to higher education.

IV

The fourth reform proposal, which we call "Improving the Status and Training of the Teacher", goes to the heart of our report.

Professor Dan Lortie of the University of Chicago, says that in the United States "real regard for to teachers has never matched professed regard." The harsh truth is that school teaching in America is in a depression. Our least able students are going into teaching, the pay is low, there is no opportunity for advancement, and the best teachers are dropping out.

In the Carnegie study we found that the big problem is not salaries or merit pay but the working conditions of the teacher. Teachers often meet 130 students in a single

day. The paper work of teachers has enormously increased.It now occupies about 20 percent of the teacher's time. There is less respect from students and parents are less and less supportive of the schools.

To overcome this "sense of powerlessness among teachers", we recommended that every school have a Teacher Excellence Fund to give teachers small grants to work on new ideas. And that there be a Teacher Travel Fund; a career ladder so good teachers can be promoted to master teacher; a 25 percent increase in teacher salaries; and a universal program of continuing education for all teachers.

We also proposed major reforms in teacher training. All teachers should major in an academic subject – not in education. All teachers should have a 5th year apprenticeship experience. Teachers should be certified by a special professional board – not by the school of education.

Simply stated: Excellence in education means excellence in teaching. We conclude that today's reform movement will be long-lasting only if the quality of teaching is improved.

V

The fifth reform shifts from teachers to the students.

In the Carnegie Report we recommended a Service Program as a requirement for all students. The truth is that, in the United States, we have not just a "school" problem but we also have a "youth" problem in the nation. Young people are cut off from older people and from real-life activities. They are waiting to grow up and they are bored.

Harold Howe, former United States Commissioner of Education, spoke powerfully about this problem when he called American youth an island in society. We say to them: "We have no use for you in our economic system – and no place for you in our community affairs." In response, youth has "gone ahead" to create a culture of its own.

This "youth pathology" has dramatic impact on the schools. There is a lethargy and sense of alienation among our students. One student told us:

> "This year I've been working at McDonalds so I can buy some new clothes and a stereo set. The work isn't all that hard or exciting but still it makes me feel on my own, that I'm doing something useful. In school you never feel that way – not ever!"

We conclude that to have healthy schools we must have healthy students. And

so, we recommend a service program in the schools. Under this plan students would volunteer to work at hospitals, libraries, art galleries, and social welfare agencies. This work would be performed after school, on weekends or in the summer.

John Gardner wrote on one occasion that: "The deepest threat to the integrity of my community is an incapacity on the part of the citizens to 'lend themselves' to any worthy common purpose." We conclude in the Carnegie Report that a service team for all students will help build a sense of community within the school and help our students understand that to be truly human – one must serve.

VI

The final reform I shall discuss, we call "Connections".

There is an urgent need to build better articulation between the schools and industry and between the schools and higher education. In the United States over 50 percent of our high schools have fewer than 500 students. These schools cannot offer a rich curriculum or laboratory experience at the upper level. We therefore propose that the last 2 years of high school be considered a "transition school", a time when students spend some time learning beyond the campus taking advantage of informal classrooms: what Lawrence Cremin, of Teachers College, Columbia University, calls the "Ecology of Education."

Let me cite just four examples to illustrate the point.

At Southwest High School in St. Louis, students travel to Monsanto Chemical to study computer language on up-to-date equipment which they do not have in school.

In Cleveland, Ohio the Museum of Art offers a program in Art History to high school juniors and seniors.

At the college level, the Advanced Placement program serves several thousand high school students. They get college credit by passing an examination.

And Syracuse University offers a University-in-the-School program. Outstanding high school teachers are selected to teach English, math and science to gifted students for college credit – in the high school.

The point is this: The high school cannot carry on its work in isolation. Community resources should be available to students and there must be better articulation

between the schools and higher education. Building such connections is essential if we expect to have excellence in education.

Conclusion

May I close by commenting on several "worries" I have about what is going on in the United States today?

First, I worry that school reform may be weakened by the politicians. As soon as the National Commission report was released, President Reagan began to talk about "merit pay" for teachers. At a recent meeting in Indianapolis, Indiana the President talked about violence in the classroom, and, in his State of the Union address, Mr. Reagan pushed for prayer in public schools. I do not wish to quarrel with the merits of these issues. I only suggest that in the United States these topics are highly partisan and political and in the end they will confuse rather than clarify the issues.

I also worry that we are not giving enough attention to student evaluation. We have no national testing program as you do here in Japan. The transition from school to work and further education is a terrible problem. In the Carnegie report, we proposed a new transition test to replace the Scholastic Aptitude Test now being used. Instead of focusing on "aptitude" for students going to college, the new test would focus on achievement and advisement for all students.

I also worry that we will impose school reforms without looking at the deeper problems affecting the teachers and students. If teacher status remains low and if students remain socially adrift, then we will only "tinker" with reform while the classroom remains pretty much the same.

Finally, I worry that our vision may be too restricted. I wonder, for example, if those of us in charge have "faced up" to the impact technology will have both on the attitudes of students and also on the way teachers teach and students learn. I wonder if we have faced up to the awesome issues our students will confront in the year 2000. Do the curriculum reforms reflect the future or are they only shadows of the past?

Finally, I wonder if the proposed reforms will help or harm the racial minorities in the United States. If we simply tighten standards and ignore social and economic problems, the gap between the minorities and the system may widen and the loss of human potential will tragically persist.

* * *

Still I must close on an optimistic note. In America we are discovering once again

that the future of our democracy depends on education. And this means quality education for all children – not just the privileged few.

James Agee a powerful 20th century American writer wrote "with every child who is born under no matter circumstance, the potential of the human race is born again." In America we are having a new burst of hope and confidence in education and I consider that cause for modest celebration.

THE EDUCATIONAL FUNCTION OF THE UNIVERSITY: AN HISTORICAL PERSPECTIVE

by Arthur Levine*

If educational history teaches us anything, it is that schooling is a practical matter. Educational institutions from kindergartens to universities are intended to teach students about the existing world of which they are a part and to give them the intellectual skills to perform in that world in a productive and socially beneficial manner.

Viewed from this perspective, higher learning has always been considered useful. The first formal European universities, nearly a millenium ago, were, as Samuel Eliot Morrison put it, "distinctly purposeful."[1] The University of Salerno, the earliest of these institutions, was a medical school. The universities that followed in its wake – Bologna, Paris, Oxford, and Cambridge – offered only four courses of study – law, medicine, theology, and the arts. The first three, all graduate programs – the equivalent of today's professional schools – were explicitly vocational and law was the most popular of all medieval studies. The arts curriculum, the undergraduate or foundation program, teaching the classical trivium and to a lesser extent quadrivium, was also practical. In the words of historian Nathan Schachner[2] – it "was not to be considered as a medium of culture; it was something utilitarian. It was a means of learning the universal Latin and the rules of Logic, so that the student could enter the professional schools..... "For those arts students who chose not to go on, the curriculum offered skills that were much in demand in the "job market" of the day..."[3]

As C.P. Snow put it – students studied a curriculum that would seem "to us arid, valueless, just word chopping." They lived in "cold, comfortless, straw strewn rooms," some "in bitter poverty and half starved." They did this for one motive; if they could get their degree, jobs lay ahead. Jobs in the royal administration, the courts, the church; jobs teaching in the schools – the fees were not light and the teachers made a good living. The training was, in fact, vocational and jobs lay at the end.[4]

The American college, a descendent of this medieval university emphasizing undergraduate education, followed in the same tradition. Eighteen century historians

* President, Bradford College, Massachusetts, U.S.A.

Samuel Davies and Gilbert Tennant concluded that the most "urgent" reason for founding the pre-Revolutionary colleges was to train a learned clergy.[5] This was an explicit rationale prominently featured in the promotional and legal documentation of these earliest institutions.

The founders of Harvard stated clearly that their college was created out of a fear of leaving "an illiterate ministry to the churches when our present ministers shall lie in the dust."[6] The College of William and Mary, the second institution of higher learning on the new continent, specified three goals in its charter – to educate the youth of Virginia in morals, to train "good ministers" for the churches of America, and to prepare Indian youth "to preach the gospel to their countrymen."[7] And Yale viewed itself and colleges in general as "Societies of Ministers for training up persons for the Work of the Ministry."[8]

The fact of the matter is that ministers were a scarce commodity in the early colonies. And their absence constituted an intolerable loss as they were expected to provide the spiritual, social, and political leadership for their new world communities.

By all accounts, the colonial colleges provided a remarkably effective remedy. It took early teenage children from the wealthier segments of society – magistrates, professionals, landed families, a sprinkling of artisans and tradesmen – and created ministers.[9] For nearly the first century and a quarter of collegiate history, half of all graduates went on to become clergymen.[10] Medicine, public service, business, teaching, and land management were the popular alternatives.[11]

Since that time, the program of the American college has undergone many and varied permutations, but the commitment to useful education has remained a persistent and consistent theme. It would be a mistake, however, to conclude that higher education is nothing more than a pale reflection of the job market; that it is as we say today a "market driven" institution. This notion conceals more than it reveals.

For the most of higher education history, there has been a splendid compatibility between the collegiate vision of an educated person and the vocations of college graduates. The products of higher education have moved less into jobs than into positions of privilege and power.

From the first, the accepted mission of the college was not to train monkish churchmen, but to educate community leaders, members of the prestige professions of which the clergy was foremost. There was wide agreement that the practical education required for all professions was a classical education. The course of study for all leaders – whether in the ministry, government, or law – was the same. It was not a narrow

Biblical training for the minister or a restricted regimen of Hippocrates for the doctor, but a broad education for the leaders of a shared culture.

The curriculum of the day was a mirror of the college's practical purposes. It was a marvelous program consisting of just twelve subjects – logic, Greek, Hebrew, rhetoric, divinity catechetical, history, nature of plants, ethics, and politics, Aramaic, arithmetic, astronomy, Syriac. It was a comprehensive treatment of the knowledge of the era. It provided students at once with both an education in breadth and depth. It taught a common language and a common Christian perspective. It prepared students for the world in which they would live and work.

Simply stated, the goal of the early American college was to provide a broad education for a narrow range of jobs. In a theocratic community, the college was created primarily as a seminary, composed of ministers, intended to train ministers. It was the broadgauged equivalent of today's professional schools.

There was, in short, an intimate bond between higher education and work, work of the highest status and work of the greatest importance. The college was inextricably intertwined into the society and its mission was to educate the small coterie of people who would provide leadership to the many in a sparsely settled, predominantly (over 90%) agarian society.

Here's the point. Students of the early colleges – just as the student generations before and after them – were preparing for productive work, But the education they received was determined not by the marketplace, but by the college's vision of an educated person. And upon graduation the young men entered the more privileged positions of leadership for which they had become appropriately equipped. The collegiate vision of the educated person and the manpower training needs of society were one and the same.

But as the nation grew and the democratic tradition blossomed this comfortable compatibility between education and vocation shifted. The number of students going on to college expanded and a more economically and socially diverse group filled the classrooms. America's colleges numbering nine on the eve of the Revolutionary War in 1776 had increased by more than 14 fold at the time of the Civil War in 1861.

Most significant, perhaps, was the change in the work place. Outward expansion and an industrial revolution opened up dramatic new possibilities for young Americans. The changing contours of the nation that challenged the tradition of higher education were vividly described by Robert Heilbroner:

By every standard, the country was vastly richer in 1860 than it had been in 1800.

> Population had increased from 5 million to 31 million. In 1800 there was no city over 70,000; now there were already two cities with more than 500,000 people. In Washington's (first president of the United States, 1789-1797) time 95 percent of the population lived in rural settings; in Lincoln's (16th president of the United States, 1861-1865) time the nation was already "urban." And whereas only 350,000 persons worked in factories or mills or hand trades in 1820 (the earliest date for which we have statistics), by the time of the Civil War there were 2 million men and women laboring in tasks that were neither agricultural nor "service" but industrial.[12]

The college program which seemed so well suited to the colonies, no longer served a nation in the throes of change. America had been transformed from a theocratic community to a burgeoning industrial society.

Highly educated young people were needed for new jobs. By 1800, ministers accounted for only 1 out of every 5 college graduates nationally. A century later they would decrease to 1 out of 20. Instead students flocked to law and medicine in rising numbers. By 1800, approximately 1 out of every 3 students chose the legal profession. In the post-Civil War decades, a majority of graduates would select careers in education (27%), commercial pursuits (22%), engineering (5%), and agriculture (4%).[13]

The point is this, as the nation underwent a metamorphosis and new job possibilities emerged, the classical curriculum no longer fit. It was no longer comprehensive. It offered neither breadth nor depth. It was poor preparation for the most of new vocations. In short, it was no longer practical.

In response to changes in the economy and the nation, a new curriculum was shaped to meet new realities. "Modern" subjects were added. In the eighteenth century, instruction was added in mathematics, medicine, and law. Engineering, science, education, and business were products of the next century. Modern languages and laboratory study more and more became curricular staples. Colleges of agriculture and mechanical arts came into being and with them came programs leading to technical and farm jobs outside the traditional collegiate sphere. The course of studies became increasingly specialized. As early as 1825, the University of Virginia began to offer undergraduates eight different and distinct courses of study ranging from ancient languages to medicine and commerce. Institutions, like Harvard and Yale, created new degrees, for nonclassical study. Majors and minors came into being.

Through the sheer expansion of subjects and programs it became impossible for colleges to continue to offer their students a single common curriculum A free elective

movement swept higher education in the last third of the 19th century. Colleges abandoned their requirements in favor of student choice. In 1869, Harvard had an almost wholly required program. In 1895, only Freshman English was mandatory.

This dramatic realignment of the curriculum – to make it "more useful" was not achieved without a struggle. Institutions across the country stood staunchly behind the tried and true. And numerous, highly publicized efforts at modernization failed as well. There was a strong conviction that colleges were losing sight of their vision of the educated person. The curriculum was being determined by the marketplace.

The perception was not entirely wrong. But what it missed was the recognition that the marketplace had always been a factor in shaping the curriculum of the college. What was different, of course, was the fact that the marketplace was making new demands. But with time an accommodation between the marketplace and college was reached. The definition of the educated person changed gradually and by degree. In part, this was an adjustment to new social and work conditions, but it was also a response to new academic realities – a quickly and continually expanding universe of knowledge. As well as recognizing the need to train for new vocations, educators more and more saw the limits of a classical core of study seeking to embrace all knowledge and all people. Clearly there was too much to learn and too many specialized pursuits to prepare for. Some choice was necessary.

The period from 1865 to about 1910 was a time of drift for the American college. Many different visions of the educated person were tried – the educated person as humanist, the educated person as utilitarian, the educated person as scholar, and more. By the end of World War I in 1918 the vision that prevailed was an amalgam combining the common intellectual and social perspective of the colonial core with the recognized need for specialization in order to master a branch of knowledge and a career. The educated person was hailed as both a generalist and a specialist. And again, there was a consistency between the college definition of the educated person and marketplace demands.

It was a match that permitted the American college to maintain its sense of intellectual autonomy while preparing students for the world of work as well. The college would continue to educate community leaders. A new curriculum and a new kind of leader had emerged. In contrast to the colonial college, the predominent pattern in higher education became general education and a major – and the major came quickly to dominate. The leaders were no longer the generalist minister and his associates, but a corps of more specialized professionals – engineers, businessmen, teachers,

scientists, and the rest. The college would offer more specialized instruction leading to a broader range of professional study and technical jobs, but still the college graduate was one certified to claim the powerful and prestigous positions.

With these changes the college was once again brought into alignment with society it would serve and the labor market it would feed. With these changes a new entity came into being – the modern college was created – the institution and the curriculum that are so familiar to us today.

In summary, the history of undergraduate education in America, and I suspect in most nations across the world, has been the story of fitting the curriculum to meet the twin goals of intellectual advancement and utility. With the growth of knowledge and changing social conditions, one curriculum grows old and another comes to replace it. Hastings Rashdall, the renowned 19th century scholar of the medieval university, put it well when he said "the intelligent artisan educated at a primary school or the half educated man of the world possesses at the present day a great deal more true and useful knowledge than a medieval doctor of divinity."[14] The fact is that the best and most useful education is rendered trivial and impractical by the passage of time.

At bottom, the commitment of colleges and universities to practical education has been constant, but the notion of what is utilitarian – intellectually and socially – is forever in flux.

Over the years, educators have argued long about *how* practical a college education should be and debated hard about *what* practical education is appropriate to a university. They have battled about the best way to educate a mind. And they have fought about whether curriculums have been designed by the academic community or constucted by workplace demands. But few if any educators have questioned whether a college education should be practical.

W.E.B. Dubois once defined the purpose of a college as developing "that fine adjustment between real life and the growing knowledge of life, an adjustment which forms the secret of civilization."[15]
This, it seems to me is the educational function of the university.

NOTES

1) Morrison, S.E., *The Founding of Harvard College* (Cambridge: Harvard Univ. Press, 1935), p.7.
2) Schachner, N., *The Mediaeval Universities* (New York: A.S. Barnes & Co. Inc., 1962), pp.124-125.
3) ———, *The Mediaeval Universities* (New York: A.S. Barnes & Co. Inc., 1962), p.310.

4) Snow, C.P., *The Masters* (New York: Charles Scribner, 1951), pp.363-364.
5) Davis, Samuel and Tennent, Gilbert, "Reasons for Founding Colleges in America" in *Annals of America* (Chicago: Encyclopedia Brittannica Inc., 1976), Vol. I, p.518.
6) Morrison, S.E., *The Founding of Harvard College* (Cambridge: Harvard Univ. Press, 1935)
7) Adams, H.B. *College of William and Mary* (Washington, D.C.: U.S. Bureau of Education, Circular or Information #1, 1887), p.2.
8) Shipton, C.D., *Biographical Sketches of Those Who Attended Harvard College in the Classes 1722-1725* (Boston: Mass. Historical Society, 1945), p.36.
9) Cremin, L., *American Education* (New York: Harper & Row, 1970), p.217.
10) Brubacher, J. and Rudy, W., *Higher Education in Transition* (New York: Harper & Row 1976), p.10.
11) Cremin, L., *American Education* (New York: Harper & Row, 1970), p.220.
12) Heilbroner, R., in Collaboration with Aaron Singer, *The Economic Transformation of America* (New York: Harcourt, Brace Javanovich, Inc. 1977), p.49.
13) Burritt, B., *Professional Distribution of College and University Graduates* (Washington D.C.: U.S. Bureau of Education Circular or Information, 1912).
14) Rashdall, H., *The Universities of Europe in the Middle Ages* (Oxford: Oxford Univ. Press, 1936), Vol. III, p.455.
15) DuBois, W.E.B. *The Souls of Black Folk* (New York: New American Library, 1969), p.84.

HIGHER EDUCATION IN AN AGE OF DECLINE

Arthur Levine*

In many western countries, the present is being thought of as an age of decline for higher education. In the United States (and a number of other nations) the realities are these:

1) The number of young people is shrinking. The post-World War II baby boom generation is now past traditional college age. By 1995, the proportion of college aged youngsters in the U.S. can be expected to drop by a quarter. The result will be a gross underutilization of higher education's capacity. Already we are witnessing a rise in institutional closures (particularly among private less selective colleges) and a lowering of admission standards at some others.
2) Public confidence in higher education has declined. In large measure this is a reflection of reduced confidence in all social institutions throughout the west. In the U.S. for instance, 61% of the public expressed a great deal of confidence in higher education in 1966. A year ago the proportion had fallen to 33%. (However, it should be noted that higher education remains the second most respected social institution in the nation.)
3) The social priority of higher education has also been reduced. Concern with education has given way to more pressing problems, such as energy, jobs, and defense. At the same time, several countries, the U.S. included, are experiencing a resurgence of interest in the schools.
4) Politically, government support for higher education has dropped. In the U.S. funding levels have fallen sharply. Support for undergraduate financial aid, basic research, graduate training (educating the next generation of scholars), and research libraries are particularly disturbing.
5) A troubled economy and high levels of inflation have severely eroded higher education resources as well.
6) The job market is difficult. Unemployment and underemployment rates for

* President, Bradford College, Bradford, Massachusetts, U.S.A.

college graduate are higher than in the past. This is a consequence of ballooning attendance rates among secondary school graduates since World War II. When 4 out of 10 high school graduates go on to college, they cannot attain the same jobs that 1 out of 10 did in the past. Additionally, the job market has changed. We are experiencing a technological revolution. The job market has taken on a boom-bust coloration. The number of technical jobs has risen quickly. Employment opportunities in more general fields have been reduced. Labor market forecasts in many post-industrial countries call for the greatest job growth at the noncollegiate education level in the years to come.

7) Competition for higher education from noncollegiate educators is increasing sharply (e.g. industry, trade, technical, and professional schools (Kakushu Gakko)). In the U.S. industry is now spending as much on education as all of higher education. And a number of major corporations are authorized to grant undergraduate and graduate degrees.

8) Current undergraduates are weaker in academic skills. College entrance verbal and quantitative tests scores have been falling (with the exception of the last two years) for the past two decades.

9) There is a growing mismatch between the subjects students most want to study and the programs colleges and universities offer. Today's undergraduates are decidedly more career and cash oriented than their recent predecessors. They are increasingly drawn to more vocational subjects – law, medicine, business, and other professional and technical fields. They are turning away from the liberal arts. However, college and university faculties are not staffed to meet this shift. The result is simultaneously underenrollment and oversubscription.

10) There is a growing uncertainty within higher education about purpose and program – who education should be serving in what manner, and toward what end.

It is because of these problems that higher education is said to be in an age of decline. I think this is a mistake. The prognosis of decline seems to me to be too pessimistic. It projects what could be a temporary ailment into a long-term disease. The chronic nature and worsening character of today's malady is by no means preordained. In fact, I believe that higher education has the tools to forestall such a development. When I say this, I do not mean to imply that there will be no shrinkage in higher education. Retrenchment is inevitable. But there need not be a qualitative loss or an overall decline.

My diagnosis of today's problem is one of hard times compounded by higher education confusion and drift. Throughout most of its history, higher education has been a growth industry. Good times have meant business as usual for colleges and universities; continuing expansion accomplished largely by adding the new to what already exists. When cries for innovation or change have been heard, they have been answered largely by purchasing new programs and hiring new staff.

In contrast, hard times have necessitated cutbacks and reappraisals. They have forced institutions to develop fresh visions to guide their futures. In the past they have summoned forth pragmatic dreams of historic proportions. They can do that again.

Hard times are periodic events in the life of higher education. In the U.S. the 1840's and 50's was such a time. Like the present, it was an era of falling enrollments, troubled economy and changing job market, a technical revolution, and reduced public support. But most important, it was a time of innovation and careful thought about the purposes of higher education. It brought forth bold and excellent new curriculums that made the names of many of America's most prestigious institutions – Brown, Michigan, and Vermont.

The point is this. Opportunity is implicit in adversity. And decline is the consequence of failing to take advantage of that opportunity.

Today much of higher education has embraced adversity and has become mired in a survival ethic; a myopic commitment to hunkering down, holding tight, and riding out the multitude of problems that afflict colleges and universities. That attitude hurts.

First, its emphasis is on minimizing risk. For leadership, colleges and universities are too often turning to managers rather than people with the creative ideas and vision to keep their institutions vibrant over the long run.

Second, the survival ethic represents a war of each against all. Faculties and departments hunker down and protect their turf. In this way each faculty member is divided from every other, each department from all the rest. Everyone is out for himself and all are in the business of survival. There are no followers and there are no leaders. Academic community dies.

Third, tough decision are not made. The inability to take the long view, the absence of supporters, and the loss of community require the politically most expedient decisions. This brings academic mediocrity.

The survival mentality is debilitating to higher education. Not only does it deprive colleges and universities of their dreams, it robs them of their reason for being. The price they pay for each additional day of life is quality. They trade excellence for survival.

It's a bad deal. Not so much because colleges give far more than they get, but because the trade will not work. Historically, survivalism has been a successful strategy only with problems of short duration and only when conditions are as bad as they are going to get. Neither is true today. The problems that plague higher education will continue for at least another decade and worsen considerably along the way. As a result, the survival strategies that work today are unlikely to work tomorrow. They certainly will not meet the challenges of the day after that.

For most colleges, survivalism offers little more than decline in slow motion. For some, the survival ethic will be a fatal mistake. The alternative is a shift from single minded concern with surviving to a commitment to thriving. The accent must shift from persisting to prospering. Put simply, higher education needs to respond aggressively to the problems that face it. They cannot be avoided. Five needs stand out:

1) Colleges need to enhance student communication skills, to ensure fluency in the two fundamental human languages – words and numbers.
2) Colleges need to rethink general education, the learning that should be common to all people. At the moment, higher education is frequently more certain about the length of a college education than it is about its content. Colleges no longer know what it means to be an educated person.
3) Colleges need to provide students with better career preparation. Current college graduates in most western countries are facing a stiffer job market than their predecessors.
4) Colleges need to reaffirm the importance of ethical values and social concerns. This is critical for a globe which is growing smaller and on which values have become blurred.
5) Colleges need to respond to changing demographic, financial, and social conditions – shrinking numbers of students, economic woes, reduced public support and the rest.

Many institutions have become preoccupied with this fifth need. It is here that the "survival ethic" is rooted. They have given short shrift to educational needs. That's an error. The historical record shows clearly that for higher education, social problems – like demography and the economy – have been surmounted best by tending to educational needs. In short, thoughtful college and university programs which meet the educational challenges of their day have achieved an excellent record of success under adverse conditions. Often they have attracted students despite hard times, and commonly they have garnered public enthusiasm despite more pressing social priorities.

In short, the most successful institutions of higher education in the years ahead are likely to be those that have best addressed today's educational needs.

The years ahead need not bring decline, they could be a golden age for higher education. It would be a shame to miss that opportunity.

PART IV

PERSPECTIVES ON JAPANESE HIGHER EDUCATION

[Editorial Note]

In view of the general lack of English language publications on the situation of Higher Education in Japan we have decided to make an addition to the regular contents of this issue.

Although not so much has been written on the subject, there is a recent growth in criticism from foreign scholars on Japanese Higher Education i.e. Reishauer, Vogel etc.. One of the papers in this section is a reply by N. Shimahara to a particularly severe comment on Japanese Higher Education from John Zeugner which appeared in a recent issue of Change Magazine.

Many readers may not be familiar with the original Zeugner article so the editors take the liberty of presenting a brief summary of the main points of the article below:

Zeugner's Puzzle of Higher Education in Japan" is an attempt to describe a number of the most outstanding problems of Japanese higher education which lead as the author states to its "very lack of success". After criticizing the general physical conditions i.e. dirtiness and coldness of the Japanese University Zeugner points out: 1) lack in adherence to class attendance by both professors and students 2) a lack of seriousness about teaching and grading compounded by daytime "moonlighting" activities of the faculty. 4) interfaculty bickering and factionalism 5) the universities' role as primarily a socializing institution and finally adds 3 warnings about Japanese universities. One, that developing countries should not send their students to Japan. The other, that funding American Studies programs in Japanese universities seems a waste of money and finally that the Japanese academics should take notice of their "factionalism, their abdication of serious concern" before it is too late.

THE PUZZLE OF HIGHER EDUCATION IN JAPAN: A RESPONSE

Nobuo Shimahara*

Introduction

Since the late 1970s, Americans have shown a growing interest in Japanese

* Professor, Rutgers University, USA.

education. That interest has been intensified, in particular, by American business organizations that sought to identify the sources of Japanese industrial strength. American magazines, newspapers, and scholarly works have often cited schooling as a wellspring of the competitiveness and unsurpassed efficiency of Japanese industry.[1] As the New York Times reported a study conducted by the New York Stock Exchange Commission, "the single most important factor in Japan's extraordinarily high productivity – more important than quality circles, techniques of management or the partnership between business and government – is the high quality of Japanese primary and secondary education."[2] The anthropologist Thomas Rohlin, attributing the high academic standards of Japanese high school education to the rigors of the curriculum and the intensity of schooling demanded in Japan, even suggested that "a Japanese high school diploma is the equivalent of an average American bachelor's degree."[3]

Relatively little attention, however, has been paid to Japan's higher education in relation to its technological superiority. Among Americans interested in the economic roles of Japanese education in a broad sense, there appears to be a common perception that higher education in Japan lacks the intensity demanded at the secondary level. Yet American curiosity concerning higher education does exist. It is in this context in which John Zeugner's article, "The Puzzle of Higher Education in Japan – Can We Learn from the Japanese" has special relevance for the American, as evident in its subtitle.[4]

In this essay, I shall respond to Zeugner's article from the intersocietal, academic perspective I have gained through may education and research in Japan and my university teaching in the United States for nearly two decades.

The Absence of Objectity

Zeugner's article reveals that he is an astute observer of Japanese higher education, but his description displays a critical lack of requisite objectivity, attributed to his extreme bias against certain patterns of practice at the Japanese universities where he was a visiting professor. He was baffled by this practice, and he underwent what he considers "ritual mandatory cross-cultural self-abasement,"[5] while visiting these institutions. He satirically characterizes himself as "lame and misdirected,"[6] and he unpretentiously declares that his critique of Japanese higher education is influenced by his ethnocentrism.

Although we might expect Zeugner's article, written for the general audience of a popular magazine, to fall short of the strictest standards of scholarly endeavor and

objectivity, we nontheless have a right to expect more than half-truths. His views of prevailing practices at Japanese universities are highly polemical and exceedingly exaggerated throughout his article. Witness the following illustrative quotations: "internal factional struggles, which in most Japanese universities reach absolutely extraordinary levels";[7] "[Japanese universities'] sole function is to keep certain students out";[8] "the university is ... a charade, a pretense, a joke";[9] "the transfer of knowledge is not the business of the Japanese university – the facilities are decrepit, the attitude toward instruction bankrupt, the responsibility of faculties nil."[10] Moreover, Zeugner's mode of analysis (presentation) is extraordinarily simplistic and reductionistic. His generalizations are based on particularistic impressions and are innocently justified by anecdotes. They are often too opinionated and distorted to be taken very seriously. In brief, he fails to describe and analyze objectively Japanese higher education.

Should one dismiss Zeugner's arguments entirely? Although his article is not adequately informative and has little objective analysis, one must admit that, despite its glaring flaws, it does present highly provocative criticisms of Japanese higher education. Such criticisms may be appreciated, and, perhaps, are useful when placed in a broader context of more dispassionate discussion on Japanese universities. Should that context be absent, Zeugner's criticisms would likely mislead a reader unacquainted with the Japanese university system.

Valid Criticisms

I shall discuss now several points of Zeugner's argument that are, in my view, valid if they are situated in the context just referred to. Then I will turn to points of disagreement.

First, Zeugner's criticisms of the taken-for-granted Japanese dichotomy between *tatemae* and *honne,* as applied to university activities, is insightful. This dichotomy is deeply seated in Japanese cultural orientation, and, as the Japanese unconsciously internalize it, it guides individual behavior in various spheres of activity, including the institutionalized practices of higher education. The Japanese are aware that individual adaptation to social situations is impossible without accepting this distinction as a norm. In contrast, American scholars who have not been enculturated in the framework of Japanese cultural orientation are often baffled by the penetration of the dichotomy into everyday activity in Japan. But as they learn the dual structure of conversation, attitudes, behavior, and institutionalized activities, they gain the cultural insight to

identify it as a paradigm that enables them to understand social activities. Zeugner employs it as a conceptual lens through which he observes contradictions in Japanese higher education. Focusing upon this dichotomy, he makes a sharp criticism:

> Sooner or later the visiting professor is taken aside and invited into the deeper mysteries of the system. The tatemae is that the university is crucial, meaningful, worthy of all respect and attention, devotion, and effort. The honne is that the university is a rest period in Japanese life.[11]

But the dichotomy between the two levels is by no means peculiar to Japanese higher education; it also plagues American universities. The difference is a matter of degree: this duality is not readily accepted as a social norm or expectation in the United States, whereas it is taken for granted in Japan. As Japanese higher education becomes increasingly internationalized, the Japanese practice of the *tatemae-honne dichotomy* will be increasingly attacked.

Second, Zeugner's critical commentary on academic factionalism in the Japanese universities deserves attention. As Japanese scholars acknowledge, factionalism is a pervasive and common characteristic of Japanese academia. It is an expression of the Japanese group orientation in general and a function of *gakubatsu* in particular. It displays negative functional characteristics leading to turf struggles and factional squabbles. It promotes particularism and division within a faculty and impedes the development of universalistic orientation needed in academia. It is understandable that Zeugner – or any visiting professor at a Japanese university – would be especially sensitive to the factional associations of faculty, because he is automatically excluded from them and is treated as a nonparticipant outsider.

As Zeugner notes, factional phenomena are hardly peculiar to Japan. They are not infrequent in the United States. At the American university, factionalism, where it exists, is subtle and temporary; in sharp contrast, at the Japanese university, it is blatant and permanent, In my many years of association with various faculties at American universities, I have never seen a *gakubatsu*-like factional division typical in Japan.

Third, Zeugner points out elements of academic and moral indifference toward large lectures at Japanese universities. Professors are usually late and often cancel classes; students are notoriously nonchalant, and attendance is low. Zeugner further observes a lack of dialogue between the professors and students, unlike in American universities; one final examination is the sole means for evaluating the student. To quote from Zeugner:

> Large lectures in Japanese universities take on the flavor of autistic happenings. The professor free associates for sixty-five minutes into his microphone while Japanese students sleep, read newspapers, and in the back rows chat quietly among themselves.[12]

His observation honestly reflects perennial problems common at Japanese universities.

I might add, however, that such problems are not unknown in the large classes for freshmen and sophomores at American universities. My colleagues who teach undergraduate classes often complain about similar problems. Though the instructor usually encourages student participation in discussion, dialogue is very difficult, if not impossible, in such undergraduate classes. Punctuality varies among American professors as well. Nonetheless American professors must consciously try to measure up to the students' expectations, because the students formally evaluate their professors' teaching competences, and their evaluations are used in considering faculty members' appointments and promotions.

Fourth, Zeugner's comment that formal academia is often relegated to a socializing experience must be examined. I am sure his observation is widely shared by Japanese professors and students. As pointed out by Zeugner, the student's course work in the first two years at a Japanese university is characterized by a lack of rigor relative to requirements and the professor's expectations. Only minimal reading is required, and the student is usually expected to take only one examination for evaluation. In contrast, at the American university, the student is expected to meet high standards: extensive reading, research, paper assignments, mid-term and final examinations. American students develop the ability and discipline to conduct research in the library and to write papers in the first two years. They take and average of only 5 courses each semester, in sharp contrast to the 15 to 20 courses that the Japanese student takes. The requirements for course work are still relatively light for the Japanese junior and senior students, in comparison with the requirements met by the American counterpart.

The relative lack of high expectations for student course work at the Japanese university creates an academic ambience leading to the relegation of formal academia to a socializing experience that plays one of the major roles in the Japanese student's life.

Fifth, Zeugner's rather lengthy reference to the bifurcation of faculty at the Japanese university is legitimate. He exposes the indivious hierarchy consisting of the faculty of general education in the lower tier and the specialized *gakubu* faculty in the upper tier. Zeugner points out justifiably the despair that general education faculty

experience, resulting from the structurally built-in denigration and academic disdain. Though pecking order is a universal occurrence among disciplines in American academia, the dichotomy of faculty common in Japan is not seen at the American university. Obviously, such a dichotomy would be especially disturbing to a visiting American professor. Zeugner's critical characterization of the Japanese faculty hierarchy calls for structural changes within the university.

Points of Disagreement

I have commented upon the meritorious criticisms that Zeugner has offered. Now I will select a few areas of Zeugner's discussion with which I disagree.

At the risk of redundancy, I emphasize that his views are distorted and suffer from the absence of objectivity. His analysis is reduced to simplistic and reductive statements magnified by colorful adjectives and nouns that evoke a sensational response. He may have succeeded in generating a sensationalism, essential for most essays appearing in popular magazines. His essay is entertaining, particularly for readers who are critical of Japanese successes in the past decade. His subtitle, "What can we learn from the Japanese?," is negatively answered. As he puts it:

> "Innumerable missionaries have testified what honored visitors want to hear. And if the American reports of Japan, from Alice Mabel Bacon's *Japanese Girls and Women* in the 1890's to Ezra Vogel's *Japan as Number One* in the 1970's, are anything at all, they clearly are compensations, projections, or fantasies from American circumstances."[13]

One cannot guess Zeugner's motive for the condescension connoted in the quotation. Certainly such condescension is unwarranted and misleading. Unfortunately, his purpose is to create a journalistic sensationalism, rather than an unpretentious and sustained understanding of the Japanese university.

In Zeugner's view, the Japanese university is nothing but a "charade" and a "joke." For, in his words, it is not worthy of respect, devotion, and effort; "... no one takes the university seriously, not the faculties who nominally teach, nor the students who nominally attend..."[14]

Undoubtedly there are Japanese professors and students who share Zeugner's view. But the extent to which that view accurately reflects the general reality of the Japanese university is an empirical question. Precisely because Japanese university education is largely based on a laissez-faire orientation that minimizes such formal requirements as attendance, paper writing, and reading, an American professor like Zeugner, who

is comfortable with the more rigid requirements common at the American university, may be inclined to view the orientation as a joke. It is a matter of fact that the Japanese university provides a great deal of freedom to its students, never available in the pre- and postuniversity years. That freedom offers a unique opportunity to engage in genuine learning in the areas of highest interest without rigid extrinsic constraints most typical in the high school years. Both professors and students are accustomed to the view that one of the functions of the university is precisely to offer such an opportunity. Zeugner's comment concerning what he calls a generalized Japanese expectation that "universities do not, and should not accomplish anything beyond their initial credential screening"[15] is nonsense and manifestly indefensible.

Zeugner's argument that "the transfer of knowledge is not the business of the Japanese university"[16] is absurd and even displays the phony quality of his sensitivity. Such an argument rests only on imagination. Yet he thinks that this is a thoughtful warning to the students of third-world nations interested in Japanese higher education. Should he be really serious in advancing his argument, he would have to base it upon evidence. University education does not consist of only deteriorated large courses of instruction in the humanities, with which Zeugner seems to be best acquainted. These should not be even *a basis* upon which a sweeping generalization is formulated. University education involves not only a variety of programs in the humanities to which Zeugner may not have been exposed, but also well-organized curricula in natural science, engineering, medicine, and law. Who can claim that the transmission of knowledge is not the business of these fields? Can the highly sophisticated, pioneering fields of Japanese industry, such as electronics, computer technology, and biochemical engineering, advance, as they have in the past, without human resources with university educations?

Zeugner overstates faculty factionalism. He argues that it creates "anarchy" in university education and leads to "the feuding that cripples any chance of innovation, modification..."[17] Hence, "the university serves as a kind of collective social fantasy, an enclave of Japanese wish fulfillment in which all consensus breaks down, all efficiency shatters, all willful direction explodes."[18] As discussed earlier, the factional phenomena do have a crippling effect on university education. But the anarchy and Japanese wish fulfillment for willful centrifugality of which Zeugner speaks are more reflective of his own fantasy than the factionalism rooted in group orientation. His psychological analysis of factionalism is misleading, to say the least.

A Final Word

Zeugner has sought extremes upon which he has built his generalizations. Consequently, his essay fails to display a thoughtful quality. Nevertheless, it is provocative and directs the reader's attention to certain areas of the university system that call for innovation. What emerges from his essay is his clear indictment of Japanese university faculties for what he considers absence of commitment to instruction, lack of responsibility for maintaining high-quality education, selfish factionalism, and the invidious bifurcation of faculty. His criticisms can generate reflection and discussion on the roles of university faculty. Though his impressionistic arguments and sensationalistic flaws must be criticized and corrected, I would like to urge that his indictment be considered judiciously. It is fortunate, in a sense, that a visiting professor like Zeugner can offer an insight into Japanese university education, which is not articulated by Japanese professors.

Footnotes

1) American major newspapers such as the New York Times periodically print articles on this topic. The special issue of Time magazine (August 1983) is another example.
2) The New York Times, November 17, 1982.
3) Thomas Rohlin, *Japan's High School* (Berkeley: University of California Press, 1984), p.160.
4) John F. Zeugner, "The Puzzle of Higher Education in Japan: What Can We Learn from the Japanese?" *Change*, Volume 16, Number 1, January/February 1984.
5) Ibid., p.30.
6) Ibid., p.31.
7) Ibid., p.27.
8) Ibid., p.28.
9) Ibid.
10) Ibid., p.30.
11) Ibid., p.28.
12) Ibid.
13) Ibid., p.30.
14) Ibid., p.31.
15) Ibid., p.29.
16) Ibid., p.30.
17) Ibid.
18) Ibid.

THE INTERNATIONALIZATION OF JAPANESE UNIVERSITY STUDENTS: A STUDY

John J. Cogan*

At twenty I realized I had a part to play in the life of my state.
At thirty I realized I had a part to play in the life of the entire nation.
At forty I realized I had a part to play in the life of the entire world.
(Shozan, 1854)

INTRODUCTION

Ever since the opening of Japan to the rest of the world in the nineteenth century there has been a concern, conscious or unconscious, with the concept of internationalization as the nation sought to establish its place in the world order. With the more recent economic boom of the 1960's and 70's, Japan was thrust prominently into the international limelight as the world focused attention on the "Japanese miracle". Now as we move toward the dawn of the 21st century, Japan has achieved the status of the world's second leading economic power and must assume the increased responsibilities in the world order which go with this success. These responsibilities weigh heavily on the Japanese people. With rapid economic growth, there came the realization that "social and intellectual 'internationalization' would have to accompany economic achievement." (Kitamura, 1983, p.1). Higher education is considered to be an especially important contributor to this process of intellectual "internationalization".

Herbert Passin defines internationalization, "as the awareness of interdependence, the process of adjusting to the involvement that arises from it, and the conditions that facilitate or impede the capacity to engage in these interactions. (Passin, 1983, pp. 22-23). Passin then goes on to outline four different levels of internationalization:

1. National – participation as a nation in international society economically, politically, and socially;
2. Organizational – the adjustments...organizations, particularly those involved in the process of international association, must make in order to be able

* Professor of Education, University of Minnesota, Minneapolis, Minnesota, USA.

to take part effectively;

3. Cultural – the adaptation of (a) culture to the exigencies of increased international interdependency;
4. Individual – on the one hand, the changes that internationalization brings to the individual and, on the other hand, the changes that must take place if individuals are to participate more fully in international activities. (Passin, 1983, p.20)

It is the individual level that is focused upon in this paper. It is here that changes in knowledge and perspective must first take place if they are to ultimately be realized at the other three levels. And it is at this level that higher education has a key role to play in the Japanese context.

The crucial question being asked of those in higher education is whether or not the current generation of Japanese now in universities, the future leaders and policy makers of the nation, is being educated with the knowledge and attitudes necessary to assume the obligations of global leadership, i.e. are the universities providing education for a global age?

GLOBAL CONCERN

It should be noted that this concern for "internationalization" in higher education is being raised in other parts of the world as well. The rapidly emerging interdependent nature of global interactions demand citizens and leaders trained and educated with a far more comprehensive view of the world than that of their predecessors. In the United States this concern has received the attention of a number of national commissions and has been the focus of a major study in an attempt to gather some benchmark data.

> Students graduating from American colleges today live in a world whose people and institutions are increasingly interdependent. Are these educated citizens prepared to understand the interactions of nations in an interdependent world? Do they apprehend world problems from a universal and multidisciplinary point of view, and can they appreciate the immense complexity of both the causes and effects of these issues? Do they perceive the extent to which individual lives, including their own, are affected by global or international conditions, and do historical perspectives guide their understanding? (Barrows, et.at., 1980, p.19)

In 1980, the Council on Learning (COL) in the United States, as part of its "Education and the World View" project, attempted to find out answers to these questions.

(COL, 1980) The Council asked the Educational Testing Service (ETS) to carry out a study which would assess what college students actually know and perceive about global relationships. A carefully chosen sample of 3000 undergraduates from 185 institutions of higher learning across the United States were selected for the study. The survey contained four sections:

1. Background information on the respondents
2. Knowledge about the world
3. Attitudes and opinions about global issues and problems
4. Self-assessment of second language capability.

The development of the survey was guided by a panel of leading scholars in a variety of discipline areas. The assessment was carried out in the winter and spring of 1980.

The findings of this national survey were not encouraging. The sample of 1000 seniors achieved a mean score of 50.5 on the knowledge test. Significant score differences were found between different fields of study – history majors scoring highest (59.3) and education majors, America's future teachers, lowest (39.8). Perhaps even more disturbing, the students' responses to the attitude and opinion scales showed a very limited and parochial view of the world. Finally, there was little relationship found between proficiency in foreign languages and understanding of foreign affairs.

The findings of this study gained widespread attention among the higher education community in the United States. The report came shortly after a national commission on foreign language and international studies authorized by President Jimmy Carter was sharply critical of the level of international understanding of students at all levels, kindergarten-university.

The COL survey results also drew attention from abroad as nations around the world expressed dismay at the low level of understanding of global issues and problems by America's future leaders. Several of my Japanese colleagues expressed considerable interest in the study findings and they encouraged me to consider replicating it with a Japanese sample of university students. This stimulated my interest and I subsequently applied for a Senior Fulbright Research Grant to carry out a replication on a national sample of education majors in Japan since that is my area of specialization.

The study is of particular importance to higher education in Japan at this point in time. As Japan seeks to establish its place in the world order it will require a generation of leaders and citizens with the knowledge and attitudes necessary to develop a global perspective. At the same time, other nations, especially those of the Pacific Rim

and East Asia, will be looking to Japan for leadership in the development of the concept of "internationalization" in their nations. Institutions of higher education in Japan will be expected to provide the necessary leadership in this task. A prerequisite to embarking on such a program is to first ascertain the current level of international understanding in Japanese university students. Only then can the necessary modifications be made to confront the enormous task ahead.

The Study

The global awareness survey of Japanese education majors was carried out with support from the Japan-U.S. Education Commission (Fulbright) and the Bush Foundation of St. Paul, Minnesota, U.S.A., during the 1982-83 academic year. I was affiliated with the Faculty of Education at Hiroshima University. It is one of the foremost Faculties of Education in Japan. This was very important in that I automatically had the advantage of the prestige and status attached to that institution. This proved to be invaluable in soliciting cooperation from other institutions throughout Japan as I went about the conduct of the study.

The intent of the study was to assess:

1. The level of knowledge of Japanese freshmen and senior teacher trainees
2. The level of their attitudinal awareness about key global issues
3. The level of competence (self-assessed) in their most proficient foreign language (MPFL).

Education majors were focused upon specifically in this study inasmuch as they, as future teachers and educational leaders, will have primary responsibility for educating the coming generations for international understanding. How well they are grounded in the knowledge and attitudes necessary to the development of a global perspective could well determine how effectively the concept of "internationalization" takes hold in Japan.

The Instrumentation

The original ETS instrument used in the United States was translated into Japanese in 1981 by a team of faculty from Sophia University, a prestigious private university in Tokyo. This group conducted a pilot study at Sophia and graciously consented to my use of it. The Japanese questionnaire was a translation of the U.S. original with minor changes in content and wording of some statements. The one major difference between the two was the elimination of the extensive background section in the foreign

language portion of the instrument. Obvious differences between the pluralistic society of the United States and the more monocultural Japanese society made it difficult to make comparisons and thus the language background section was omitted in the translated version.

A further modification in the attitude and opinion scaling section was the collapsing of the Likert categories from five to three choices. In the original U.S. version, respondents could choose from: "strongly agree", "agree", "indifferent", "disagree", and "strongly disagree". The Japanese felt that these distinctions were too fine and would only confuse the students. Thus the two extremes were merged into "agree" and "disagree" with "indifferent" inbetween.

As already noted, the survey instrument contained four major sections and took about two hours to administer. The first section was designed to ascertain extensive background information on the respondents. This was followed by a section on interest in and use of the respondents' "most proficient foreign language". Next came a series of three attitude and opinion surveys. The first series of questions was designed to determine how the students perceive eight major world issues. Respondents were asked to rate each of the issues on eleven different factors of importance. The second part of this series asked the students to indicate their agreement or disagreement with 32 statements related to human rights, chauvinism, world government, cooperation, and war. The third part was a personality assessment in which the students had to reply "true or false" to statements such as "I make an effort to meet people from other countries", designed to measure their interest in the world and the kinship with and concern for others.

The final part of the instrument consisted of 101 questions clustered around 13 topics and designed to test the respondents' knowledge about the world.

One final note on the instrument is in order. Once I had obtained the translated instrument, I carried out a backtranslation of same to ensure accuracy of the translated version before dissemination and administration. I did this in consultation with several Japanese colleagues who questioned the need initially but were soon convinced of the efficiency of such an undertaking. The process took a considerable amount of time but in the end we uncovered 30 plus translating errors including some major ones. All agreed that this had been time well spent. This is a facet often overlooked in the conduct of cross-national or cross-cultural research.

The Sample

A stratified random sample was drawn for the study from the total population

of national universities throughout Japan involved in the training of teachers and educational leaders. The stratification was based upon both geographic location and the size of the institution. Fourteen national universities were selected to participate. In addition, two private universities were asked to take part. Both agreed initially but one dropped out later for political reasons.

The target was to select, at random, 100 students from each institution – 50 freshmen and 50 seniors, engaged in teacher training programs. As in the U.S. study, a faculty member was secured on each campus to coordinate the research activities. They were paid a modest honorarium to draw the sample according to my instruction, administer the survey instrument (2 hours), collect and return to me.

A total of 1600 instruments were mailed out (800 to freshmen; 800 for seniors). There were 1436 completed questionnaires returned – a response rate of 90%. This jumps to 96% if you factor out the 100 instruments sent to the university which dropped out of the study before administration. In drawing the sample for analysis a further sampling was conducted to assure randomness across the population. As a result, 418 freshmen (177 men (42.3%); 240 women (57.4%) and 407 seniors (207 men (50.9%); 199 women (48.9%), were selected for a total population of 825.

The Findings

The mass of data generated by the global awareness survey instrument is, to say the least, overwhelming. I have only begun what will undoubtedly be a long period of analysis and re-analysis. The ultimate goal is a thorough comparative analysis of the Japanese and U.S. data.

The findings will be grouped into four areas:

1. General background data
2. Knowledge
3. Attitudes
4. Foreign language

Where appropriate, comparisons are drawn with the results of the American survey.

General Background Information

Before looking at the findings in specific areas, some understanding of the make-up of the respondents is in order. Some thirty (30) background questions were posed to draw out this information. Who, then, are these respondents?

They are about evenly divided in terms of gender, i.e., 53% female and 47% male.

They come from across the range of subject disciplines, e.g., biological and physical science, social science, humanities and linguistics, math, art and music, foreign language, general education and a number of others.

As for family background, about 23% of their fathers had completed a university degree whereas only 4.5% of their mothers had done so. Most mothers completed their schooling at the senior high school level (53%).

Regarding political preference, most of the respondents, 77% of the freshmen and 69% of the seniors, expressed none. Of those with a preference, most chose the Liberal Democratic Party (LDP) with the Japan Socialist Party (JSP) a distant second. These preferences were in line with those of their parents, i.e., 38% of the fathers and 33% of the mothers also showed a preference for the LDP. Even then, however, 40% of the respondents didn't know their father's political preference and 50% didn't know their mother's. The final question in this area asked them to place themselves on a political continuum from Left to Right. The vast majority of the respondents, 69% of the freshmen and 62% of the seniors, placed themselves squarely in the middle. It should be noted here that this pattern was somewhat similar in the U.S. sample with 60% of the freshmen and 43% of the seniors expressing a middle-of-the-road political preference.

With respect to how the respondents gained their information about global issues and events, some interesting comparisons with the U.S. sample emerge. The Japanese appear to be more interested in the news than their American counterparts. In response to the question, "How often do you watch world and domestic news on television?", 48% of the freshmen and 62% of the seniors reported daily watching. American students responded with 15% and 25% respectively.

With respect to the daily consumption of radio news the reverse proved to be true. In response to the question, "How often do you listen to local news on the radio?", 40% of U.S. freshmen and 34% of U.S. seniors reported listening more than once a day. Their Japanese counterparts reported figures of 14% and 17% respectively.

In the U.S., those who scored highest on the knowledge test were those who read newspapers daily and read weekly news magazines; not those who listened to radio and watched TV. In light of this, the Japanese response proves very interesting. In response to the question, "How often do you read a newspaper?", 67% of Japanese freshmen and 76% of Japanese seniors reported daily reading patterns. The American percentages were 30% and 36%. The regular reading rates were expressed in terms of the following Japanese papers in Table 1.

Table 1

WEEKLY NEWSPAPER READING FREQUENCY FOR INTERNATIONAL NEWS

	Freshmen	Seniors
1. Asahi Daily	58%	54%
2. Mainichi Daily	11%	13%
3. Yomiuri Daily	14%	16%
4. Sankei	3%	2%
5. Tokyo Shinbun	–	.5%
6. Nikkei	14%	.5%
7. Other	–	14%

In terms of weekly news magazine reading, 51% of the Japanese freshmen and 74% of the seniors reported regular reading. The figures for the U.S. sample were 73% for the freshmen and 63% for the seniors.

Based upon the figures in these several media categories, the Japanese respondents should do as well as or better than their American counterparts on the knowledge section of the survey. As we shall see in subsequent analysis of the data, that proved to be the case.

Another area in the U.S. survey which appeared to have a relationship to global understanding was the frequency of exposure to global problems and issues in their college classes. In response to the question, "How often did you study or discuss world problems or issues in your college classes?", the Japanese reported figures of 42% and 34% as compared to 50% and 54% for the Americans in terms of once or twice a week. History and the social sciences were most often cited as contributing in this area. This was also the case in the U.S. sample.

On the other hand when the respondents were asked, "To what extent have your college experiences outside of the classroom contributed to your awareness of world issues," the U.S. sample indicated a much larger impact, i.e. 36% for freshmen and 49% for seniors as compared with 10% and 8% respectively for the Japanese. The survey instrument was not designed to ascertain what these outside experiences were and this is indeed unfortunate. One wonders if there were any consistently significant experiences which professors might use to strengthen in-class learning.

It is often said that there is no substitute for traveling abroad in gaining both knowledge and improved attitudinal perspectives on the world. Yet only 2% of Japanese

freshmen and 10% of the seniors have travelled outside Japan as compared with 58% of the U.S. freshmen and 64% of the American seniors. In terms of the Japanese sample, it can be safely concluded that foreign travel had little or no impact on performance in the global survey.

Foreign language is another factor often mentioned in the acquisition of global understanding. When Japanese were asked to identify their "most proficient foreign language" (MPFL), 96% of the freshmen and seniors named English. There was no overwhelming counterpart for the American students, although for Spanish the figures were 57% for freshmen and 43% for seniors. This points out three important factors to be kept in mind when analyzing the results. First, the strong commitment of the Japanese to learning English. The nation is well aware of the importance of English in the conduct of international affairs and world trade. Considerable emphasis is placed upon the learning of English from junior high school onward. Indeed, it is one of the major areas of assessment in the common university entrance examinations. Second, the figures point to the monocultural/monolingual nature of Japan and the pluralistic character of the United States. Third, it emphasizes the results of policy emanating from a centralized Ministry of Education as opposed to a de-centralized system (state directed) where no uniform policy exists. The Japanese commitment to the learning of a second language is unambiguous. The lack of a coherent second language policy will continue to work to the detriment of U.S. citizens as they increasingly face the need to interact with fellow citizens around the world.

A profile of the typical Japanese respondent in global survey can be summarized as follows:

1. An A or B student...
2. As likely to be female as male...
3. From across the range of disciplines of study...
4. With little preference for party politics...
5. Who watches television news...
6. Who reads newspapers and weekly news magazines...
7. Who has had moderate exposure to global issues and problems in college classes...
8. Who has not traveled abroad...
9. And who has declared English as their most proficient second language.

Knowledge

Now that we have a profile on the Japanese respondents, what do they know

about the world? It is the knowledge area of the survey which has drawn most of the comment in the U.S. study. As noted at the outset, U.S. seniors who were education majors scored lowest in this area. A general scan of the comparative mean scores indicates that Japanese students scored better. The mean score for Japanese seniors was almost a full 10% better – 49.3% and 39.8%. Thus, the Japanese education majors not only scored better than their U.S. counterparts; they scored just short of the national mean for *all* discipline groups in the U.S. survey – 50.5%.

Limited space simply does not permit a detailed analysis of the findings in this area. However, it is worth noting several of the questions which seemed to give Japanese respondents particular difficulty. These were questions in which about one-third (34%) or less of the respondents answered correctly. There were 27 such questions or about one-fourth of the total which fall into this category. A sample is listed in the following pages with an asterisk (*) next to the correct response. It should be further noted that on a vast majority of these items, U.S. respondents also scored correctly less than 34% of the time.

The largest groups of people living outside their home countries in 1978-79 were made up of

(1) Political refugees leaving or fleeing their countries

*(2) Foreign workers and their families working and residing in West European countries

(3) Legal and illegal immigrants to the United States

(4) Military forces of the United States and the Soviet Union stationed in the territories of allied countries

Which of the following is the major reason why more and more countries in Asia, Africa, and Latin America have become net food importers in the last fifty years?

(1) Generally they have not had the resources to grow enough food to feed their populations.

*(2) They have been encouraged to shift production from food crops to cash crops.

(3) Importing food has seemed desirable as a hedge against frequent crop failures.

(4) They have shifted a large part of the labor force to industrial production.

Taiwan, Hong Kong, Singapore, and South Korea all experienced which of the following during the 1970's?

*(1) Rapid growth of light industry

(2) Massive in-migration

(3) Increasing poverty

(4) Serious unemployment

A very high degree of interdependence is a basic fact of contemporary international life. Which of the following is NOT a significant consequence of interdependence?

(1) Interdependence intermingles domestic with foreign policies.

*(2) Interdependence is associated with an increased willingness to renounce war as an instrument of national policy.

(3) Interdependence makes it highly probable that significant events in, or actions by, nation A will have serious effects on nations B, C, D, etc., and vice versa.

(4) Interdependence may make both self-sufficiency and dependency (e.g., reliance on imports of essential raw materials) difficult and costly.

Since the Second World War, ethnic or religious groups that have engaged in violent conflict with one another include which of the following?

I. Jews and Arabs

II. Hindus and Muslims

III. Christians and Muslims

IV. Catholics and Protestants

(1) I only

(2) I and IV only

(3) II and III only

*(4) I, II, III, and IV

In the area of human rights, the major accomplishment of the Helsinki Accords was the

(1) Establishment of a court where human rights complaints can be heard

(2) Acknowledgment of the signatories' right to intercede in the event one of their members violates human rights

(3) Commitment made by the United States to admit as an immigrant any Eastern European who can show that his or her human rights have been violated

*(4) Recognition accorded human rights as a legitimate subject of discussion in the East-West debate.

Although not indicated by the examples given above, both Japanese and U.S. students had considerable difficulty with questions dealing with religious issues. This area more than any other seemed to give respondents from both samples problems.

Perhaps a comment or two is in order regarding how the knowledge instrument was put together. The assessment committee had to choose between two approaches:

1. International relations
2. Global issues

The committee chose the latter inasmuch as global issues transcend world regions and nations and thus required a global perspective of the respondents. This approach also includes multiple dimensions and permitted the tracing of ramifications of the issues over space and time. The 101 questions were clustered around 13 topic areas:

1. Environment
2. Food
3. Health
4. International monetary and trade
5. Population
6. Energy
7. Race and ethnicity
8. Human rights
9. War and armaments
10. Arts and culture
11. Religious issues
12. Relations among states
13. Distributions of national characteristics

In addition, many of the knowledge items were not designed to test traditional textbook learning only. Rather they required the respondent to have a current knowledge of issues and events as presented in the mass media of communication as well. This is why those who watched and listened to television and radio news and especially those who read newspapers and weekly news magazines did better on this section of the survey. Newspapers and news journals give more in-depth coverage to issues and since the Japanese respondents read more they scored better.

Finally, this was not an easy test. It required not only knowledge but the ability to synthesize and integrate data as well. A number of the Japanese respondents commented on the difficulty of the measure by saying it was just like taking the social studies portion of the common university entrance exam all over again!

Attitudes and Opinions

Knowledge is but only one way of understanding. Perhaps equally important,

and yet often overlooked in surveys of global understanding, is the area of attitudes and opinions, i.e. how do the respondents view their world? Without an attitude set which is open to the ideas, traditions, problems and ways of other peoples and nations, the chances for attaining an increased level of international understanding are diminished.

It is in this area where some of the most interesting findings of the study are found. As noted earlier, there were three attitude measures employed. The first was designed to ascertain how the respondents perceived global issues. There were eight problems/issues to be rated.

1. Environmental pollution
2. Denial of basic human rights
3. Unemployment
4. Intergroup conflict
5. Depletion of natural resources
6. Inflation
7. Malnutrition and inadequate health care
8. International conflict of war

On each of the eight scales there were eleven statements with which the respondent was to express agreement, indifference, or disagreement. Table 2 provides an example.

Table 2

EXAMPLE ASSESSMENT OF WORLD PROBLEMS

Environmental Pollution

Agree	Indifferent	Disagree
1. This problem is important.		This problem is unimportant.
2. I know very little about this problem.		I know a lot about this problem.
3. The American government can do a lot to solve this problem.		The American government can do very little to solve this problem.
4. This problem will decrease in the next twenty years.		This problem will increase in the next twenty years.

Agree	Indifferent	Disagree
5. This problem is not interesting to learn about.		This problem is interesting to learn about.
6. This problem is solvable.		This problem is unsolvable.
7. International organizations can do very little to solve this problem.		International organizations can do a lot to solve this problem.
8. This problem is unavoidable.		This problem is avoidable.
9. This problem is related to many other problems.		This problem is not related to many other problems.
10. This problem is temporary.		This problem is long-term.
11. This problem is of concern to people in many parts of the world.		This problem is of concern to people in only a few parts of the world.

This same pattern was repeated for all eight issues listed above.

A close examination of the Japanese respondents' answers reveals some interesting patterns of belief and opinion.

1. They believe that these are all important problems.
2. But they also believe that these problems are unavoidable, with the exception of Intergroup Conflict and Malnutrition and Adequate Health Care.
3. They believe, again with the exception of Malnutrition and Inadequate Health Care, that these problems are all related to many other problems, i.e. they are complex problems.
4. They also believe that most of these are long-term rather than temporary problems.

The U.S. respondents, on the other hand, tended to believe:

1. That government could do much more to solve these problems.
2. That these problems were solvable whereas the Japanese remained indifferent

on this issue.

3. That these were global problems whereas the Japanese were again not clear on this.

The second of the attitude measures asked respondents to express their level of agreement with 32 statements indicative of attitudes toward human rights, war, chauvinism, world government and cooperation. A summary of the results show that the Japanese respondents were:

1. Very strongly opposed to war or any justification for it.
2. Strongly supportive of human rights for all.
3. Generally favorably disposed to some form of world government.
4. In favor of a greater degree of cooperation among nations and international organizations.

In the main, the Japanese respondents tended to be more altruistic and less chauvinistic than their American counterparts on these opinion statements. Several examples serve to illustrate the point.

		Agree	Indifferent	Disagree
2. I believe that Japan/the United States should send food and materials to any country that needs them.	J	F 87.5	9.6	2.9
		S 89.9	9.1	1.0
	US	F 36.7	16.9	46.5
		S 36.5	12.7	50.8
4. The immigration of foreigners to this country should be kept down so that we can provide for Japanese/American first.	J	F 4.3	29.9	65.8
		S 3.9	25.1	70.9
	US	F 49.2	20.3	30.5
		S 41.9	18.7	39.4
7. Since the world's supplies of essential minerals are limited, the mining and distribution of mineral resources should be controlled by an international authority.	J	F 74.1	22.8	3.1
		S 72.5	24.8	2.7
	US	F 36.2	26.5	37.3
		S 31.7	19.4	48.9
14. Patriotism and loyalty are first and most important requirements of a good citizen.	J	F 8.3	50.7	41.0
		S 8.1	44.9	46.9
	US	F 54.4	25.1	20.5
		S 43.5	25.5	30.9

		Agree	Indifferent	Disagree
15. Immigrants should not be permitted to come into our country if they compete with our own workers.	J	F 6.8	51.0	42.2
		S 8.1	50.1	41.7
	US	F 29.1	26.5	44.3
		S 28.1	22.7	49.1
21. It is our responsibility to do everything possible to prevent people from starving anywhere in the world.	J	F 93.9	5.3	0.7
		S 92.3	6.9	0.7
	US	F 49.0	23.0	28.0
		S 52.8	13.6	33.6
25. Japan/the United States should be open to all those who wish to settle here.	J	F 63.6	30.3	6.1
		S 63.3	30.5	6.2
	US	F 38.8	22.4	38.8
		S 39.8	21.3	39.0
26. No duties are more important than duties toward one's country.	J	F 15.5	56.3	28.2
		S 13.1	55.8	31.1
	US	F 39.8	25.5	34.7
		S 27.5	24.0	48.6

% J = Japanese respondents
% US = United States respondents
F = Freshmen
S = Seniors

Noteworthy in some of the examples, especially those focusing on open immigration to one's country is the fact that positive attitudes expressed by these students run directly counter to recent past practices of the Japanese government, e.g. the small number of Southeast Asian refugees permitted into the country; the treatment of third generation Koreans living in Japan, and naturalized citizens, as foreigners. One must wonder aloud whether the open attitudes expressed by these students are representative of only them or perhaps are an early signal to a change in the attitude of the nation toward *gaijin*, foreigners.

The final part of the attitude and opinion section was a ten-item self-perception scale in which the respondents were to indicate whether or not the statement accurately described them. The Japanese and U.S. respondents were in general agreement on eight of the ten items (see table 3). The two where they disagreed provide an interesting perspective.

Table 3

COMPARISON OF STUDENT SELF-PERCEPTIONS

			True	False
1. I am interested in international relations and acquire information about international developments whenever I can.	%J	F	30.8	69.2
		S	34.2	65.8
	%U.S.	F	60.3	39.7
		S	65.3	34.7
2. The fact that a flood can kill 25,000 people in India is very depressing to me.	%J	F	74.5	25.5
		S	71.3	28.7
	%U.S.	F	70.5	29.5
		S	69.0	31.0
3. I am most comfortable with people from my own culture.	%J	F	74.8	25.2
		S	78.4	21.6
	%U.S.	F	78.6	21.4
		S	77.9	22.1
4. I feel a strong kinship with the worldwide human family.	%J	F	38.6	61.4
		S	37.9	61.8
	%U.S.	F	41.4	58.6
		S	42.4	57.6
5. I rarely read news articles about international events.	%J	F	34.1	65.9
		S	19.7	80.0
	%U.S.	F	26.0	74.0
		S	20.3	79.7
6. I find the customs of foreigners difficult to understand.	%J	F	31.3	68.5
		S	25.6	74.4
	%U.S.	F	27.8	72.2
		S	22.8	77.2
7. When I hear that thousands of people are starving in Cambodia I feel very frustrated.	%J	F	57.3	42.2
		S	50.9	49.1
	%U.S.	F	69.4	30.6
		S	71.6	28.4
8. I am not interested in studying other cultures.	%J	F	9.1	89.7
		S	6.9	93.1
	%U.S.	F	12.1	87.9
		S	12.1	87.9

			True	False
9.I have almost nothing in common with people in underdeveloped nations.	%J	F	18.5	81.3
		S	15.5	84.5
	%U.S.	F	28.0	72.0
		S	27.7	72.3
10.I make an effort to meet people from other countries.	%J	F	17.0	82.5
		S	11.3	88.2
	%U.S.	F	60.0	40.0
		S	58.6	41.4

J = Japan
U.S. = United States
F = Freshmen
S = Senior

In item one, the Japanese respondents expressed a general lack of interest in learning about international developments. And on item ten they noted little effort in meeting people from other countries. Both of these are attitudes which could show a tendency toward an insular rather then an international perspective. These opinions also are in conflict with the general nature of the Japanese responses on the 32 item "Opinion Survey" described earlier. Given that the respondents are education majors, the future teachers, policy makers and professors for the nation, coupled with Japan's increased prominence in the world order, this should be noted as area of concern by those in Japanese higher education circles.

Foreign Language Attitudes

The final assessment area to be examined is concerned with language attitudes. As noted earlier, in the original instrument there was an extensive background section on the respondents "most proficient foreign language" (MPFL). Foreign language is another factor often mentioned in the acquisition of a global perspective. When Japanese were asked to identify their "most proficient language" (MPFL), 96% of the freshmen and seniors named English. There was no overwhelming counterpart for the American students. Due to the monolingual nature of the Japanese, most of the background section was eliminated when the instrument was translated into Japanese.

The foreign language attitude assessment consisted of fifteen statements regarding the importance of second language learning. The respondents were to indicate

their degree of agreement with or indifference to each of the statements. Table 4 outlines some of the more significant attitudes expressed by the Japanese respondents.

Table 4

SELECTED FOREIGN LANGUAGE ATTITUDES

	Agree	Indifferent	Disagree
1. I enjoy meeting people who speak other languages.	%F 46.9 %S 42.0	42.3 44.2	10.5 13.5
2. It is important for Japanese to learn foreign languages.	%F 88.3 %S 86.7	10.3 11.3	1.2 1.7
3. Studying a foreign language can be important for me because I think it will someday be useful in getting a good job.	%F 15.1 %S 10.3	41.4 41.8	43.3 47.7
4. Foreign languages are not an important part of the school program.	%F 73.9 %S 74.4	20.8 22.4	5.0 3.2
5. Studying a foreign language can be important for me because it will enable me to better understand and appreciate the art and literature of another country.	%F 44.0 %S 43.0	39.5 44.0	16.3 13.0
7. If I had to stay for an extended period of time in a country whose language I did not know at all, I would make an effort to learn that language even though I could get along in that country by using English.	%F 77.8 %S 80.3	14.4 13.0	7.7 6.6
15. Studying a foreign language can be important for me because it will make me a more knowledgeable person.	%F 56.2 %S 58.5	37.3 31.4	6.2 10.1

Although the respondents are in strong agreement about the importance of learning a foreign language, they are not in agreement on why it is important, e.g. #3, #5, and #15. They show a willingness to learn the language of a country they are to stay in for an extended period of time. Of particular interest is the finding (#4) that although most of the respondents indicated they learned their MPFL in school,

98% of the freshmen and 99% of the seniors, nearly three out of four do not believe that foreign languages are an important part of the school program. And finally, the mixed result in response to question #1 would seem to support and confirm the finding in #10 of the self-perception scale discussed earlier. In that instance over 80% of both the freshmen and senior respondents indicated they made little or no effort to meet people from other countries. In the language attitude assessment only a moderate number of the respondents indicated they enjoyed meeting people who spoke other languages.

Conclusions and Implications

So what does all of this mean for those involved in Japanese higher education? One must begin this commentary with a caveat. In any study of a cross-national, cross-cultural nature, where an instrument which was developed for use in one nation is subsequently translated for use in another, one must always be cautious in making sweeping generalizations about the findings. In this instance every possible precaution was taken including backtranslation of the instrument, modifying questions so that they translated properly and even eliminating items or sections which simply did not translate. Even so, the readers should keep this in mind as they read the conclusions and implications.

A summary of the findings shows that the Japanese respondents, all education majors, scored better than their American counterparts, a full 10 percentage points better for seniors and nearly 11% for freshmen, on the knowledge segment of the survey. Indeed, they scored nearly at the national mean for the U.S. sample (50.5%) which included all discipline areas. Nevertheless, the score, 49.3% does not reflect an exceptional level of knowledge on the part of the respondents either in Japan or the U.S.

The sum of this is that Japanese education majors, the vast majority of whom will go on to be teachers, know more about the world in which they live than their U.S. counterparts. This may be attributed in part to the exam oriented Japanese educational system, i.e. students are better prepared coming into university as a result of having studied for and passing the university entrance examinations. There are doubts, however, about the Japanese respondents interest in global affairs as only one-third answered in the affirmative to the question, "I am interested in international relations and acquire information about international developments whenever I can". Just the reverse was true in the U.S. sample where two-thirds indicated interest.

Another factor which cannot be overlooked is that the Japanese read newspapers

more frequently than their American counterparts and there is a positive correlation between newspaper reading and performance on the knowledge test. Japanese newspapers in general carry a far greater volume of international news than do most U.S. papers.

Some have argued that the knowledge test is unusually difficult and thus the mediocre performance. Others claim that since it is not based strictly upon academic textbook knowledge it is unfair. Both of these charges miss the stated intent of the test, "namely, to measure what *should* be known at a criterion level or .... needs to be known if global situations and processes are to be fully understood." (Barrows, et.al. 1981, p.134). In terms of this, neither the Japanese nor the U.S. sample did particularly well. It does, however, give those in higher education on both sides of the Pacific something to consider in terms of the orientation of their course lectures, readings and assignments with the goal of internationalizing their students. It also gives educators in both nations a basis for comparison and a benchmark for future efforts.

One final comment regarding the knowledge section is in order. It is the difference in correct response rate between the freshmen and senior students. While the difference in the overall U.S. sample was about 10% there was only a 2% differential between the freshmen and senior students in the Japanese sample. It has already been noted that one possible reason for this is the nature of the exam system leading up to admission to university entrance. The other side of the question, however, is what happens, or doesn't, during the four years at university which would account for such a low score difference. This finding alone give those in higher education, especially in Japan, cause to wonder about and reflect upon the international content of university courses of study.

On the second major component of the survey, the attitudinal dimension, the Japanese respondents appear to be more altruistic on questions of chauvinism, human rights, cooperation, etc. than their American counterparts. On the other hand, the Japanese are far less optimistic about the possibility of solving global issues and problems; indeed, they believe they are unavoidable. It is important to note, however, that the altruism expressed by the students is not necessarily reflected in Japanese policy, the immigration of foreigners and refugees to Japan being a case in point. One has cause to wonder, therefore, as to whether the attitudes expressed by the respondents are indicative of a shift in Japanese attitudes generally or only amongst this group.

Some have argued that the Japanese focus on "internationalization" is merely a screen to cover rising nationalism.

> The internationalization of Japan is first and foremost an economic matter, and secondarily it refers to processes which result from and/or facilitate economic internationalization... In short, the goal of Japan's internationalization is to enhance and protect Japan's national interest, and this is expressed most prominently in economic terms...Internationalism and nationalism are supposedly anti-thetical to one another. Yet in the Japanese case, one leads directly to the other (Befu, 1983, pp.260-261).
>
> "...internationalism is often used to mean the smooth promotion of "Japan's national interests." In this context, the term has come to mean the achievement of Japan's economic goals overseas without rocking the boat in international waters. (Mouer & Sugimoto, 1983, p.269)

However, the data gathered in this study do not suggest this trend. And, even if the arguments put forth above are accurate, the Japanese conceptualization may be rather commonplace around the world. Indeed, the parochialism displayed by the U.S. respondents would appear to suggest that this concept of "internationalization" is prevalent in America as well.

The final section of the survey on attitudes toward foreign language study shows that Japan has made a strong commitment to second language learning which is far from true in the United States. There was a marked difference between the Japanese and American samples in terms of their motivation or interest in studying a second language. The Americans were much more motivated by personal interest whereas the Japanese gave more weight to a question relating to the national interest in learning a second language.

"It is important for Japanese/Americans to learn foreign languages."

Japanese	F - 88.5%	
	S - 86.9%	
U.S	F - 75.3%	
	S - 81.1%	

The question left unanswered in this area is one which the data simple doesn't provide for: does interest in global or international affairs motivate students to study foreign languages or is it just the reverse? The answer may provide some direction to those working in both the teaching of foreign language and the study of international affairs.

What is to be learned from this study for those working in higher education? Although the Japanese respondents scored better on the knowledge section and were more altruistic in general in their attitudes than their American counterparts, neither group performed at a very commendable level. There are some things those in higher education might consider as they seek to improve the level of global understanding of their students.

1. Deans and their faculties need to make a solid and longterm commitment to internationalizing their programs. This is an essential first step if results are to be widespread and longterm.

2. Faculty in turn must direct their attention to the formal curriculum and must build the concept of "internationalization" into a variety of courses which affect the majority of students.

3. Faculty should also seek to work with colleagues in cross-disciplinary and/or interdisciplinary fashion. Students must learn that global issues and problems cut across disciplines and are not the unique domain of the social sciences.

4. Course discussions and assignments, where feasible, should focus on global examples of concepts and generalizations being illustrated.

5. Related to this, regular reading of newspapers and news journals which carry a significant amount of international news should be required of students by course instructors.

6. The learning of at least one additional language should be required of all university students in any nation (the United States is woefully inadequate in this area) and this language should include a cultural as well as a linguistic focus. This will enable students to not only achieve technical skill in the language but develop empathy for the point of view taken by others as well.

7. The curriculum must also focus upon ways to develop positive attitudes toward others on the part of students. This area is generally lacking in higher education curricula. Without attention to this area, however, the knowledge gained may not be utilized in a meaningful and productive way.

8. Finally, universities need to increase the contacts with institutions in other countries in terms of student and scholar exchanges.

These changes will not take place overnight. As we are all aware, institutional change comes about slowly. But the volume of global issues and problems will not lessen. It is a challenge to all of us involved in higher education to take up this challenge and lead the way toward the goal of internationalization. Higher education has a primary

responsibility in this matter.

It is hoped that the findings of this study coupled with those of the research project on "the Internationalization of Higher Education" recently carried out by the faculty and staff of the Research Institute for Higher Education at Hiroshima University will enable those involved in higher education in Japan to continue the process of "internationalizing" higher education not only in Japan but by providing models for others to follow as well.

REFERENCES

Barrows, Thomas S. *College Students' Knowledge and Beliefs: A Survey of Global Understanding.* (New Rochelle, NY: Change Magazine Press, 1981).

Barrows, Thomas S., et.al. "What College Seniors Know About Their World", in *Education and the World View, Part IV,* (New Rochelle, NY: Change Magazine Press, 1980), pp. 19-37.

Befu, Harumi. "Internationalization of Japan and Nihon Bunkaron", in *The Challenge of Japan's Internationalization: Organization and Culture,* Hiroshi Mannari and Harumi Befu, eds. (Tokyo: Kodansha International, Ltd., 1983), pp. 232-266.

Kitamura, Kazuyuki. "The 'Internationalization' of Higher Education in Japan", *The Japan Foundation Newsletter,* (Tokyo: The Japan Foundation; May, 1983), pp. 1-4.

Mouer, Ross E. and Sugimoto, Yoshio. "Internationalization as an Ideology in Japanese Society", in *The Challenge of Japan's Internationalization: Organization and Culture,* Hiroshi Mannari and Harumi Befu, eds. (Tokyo: Kodansha International, Ltd., 1983), pp. 267-297.

Passin, Herbert. "Overview: The Internationalization of Japan - Some Reflections", in *The Challenge of Japan's Internationalization: Organization and Culture,* Hiroshi Mannari and Harumi Befu, eds. (Tokyo: Kodansha International, Ltd., 1983), pp. 15-30.

THE GUIDANCE OF FOREIGN STUDENTS AT JAPANESE UNIVERSITIES
– A LOOK AT THE ORGANIZATIONS AND PERSONS RESPONSIBLE –

Joseph Eugene Hicks*

Introduction

Recently, in a committee policy report to the Japanese Ministry of Education (Mombusho) entitled "Foreign Student Policy for the 21st Century", it was proposed that a tremendous and sudden increase be made in the number of foreign students. In terms of actual numbers it was recommended that an increase be made from the present level of around 10,000 to 40,000 by 1992 and to 100,000 by the year 2000 (See Table 1).

This dramatic gesture in itself is one way towards an internationalization of education in Japan and towards sharing some of Japanese economic and educational success with developing countries. However, in all of the surprising speculation about numbers, the ultimate question arises as to whether this is a feasible goal. From various sources (although few are in existence) and from results of a study done at Hiroshima University between 1982 and 1984 by the present author, it appears that a long hard look at the reality of the present situation of foreign students in Japan is necessary before making plans to have so very many others here.

With the exception of a few special institutions. Japan is rather new to the business of handling foreign students and Japanese universities have little experience in dealing with the problems of large numbers of foreign students. In addition to this lack of

Table 1. Present and Projected Number of Foreign Students

Division / Year		University Level (including Jr. College)									Technical Schools/ Business Schools (Mostly Private)	TOTAL		
		Undergraduate Level			Graduate Level			Sub-Total						
		National	Other Public/ Private	Total	National	Other Public/ Private	Total	National	Other Public/ Private	Total		National	Other Public/ Private	Total
Early Period	1983	1,586	4,095	5,681	2,943	962	3,905	4,529	5,057	9,586	842	4,529	5,899	10,482
	1992	5,800	17,300	23,100	9,600	3,700	13,300	15,400	21,000	36,400	3,600	15,400	24,600	40,000
Final Period	2000	15,000	45,000	60,000	20,000	10,000	30,000	35,000	55,000	90,000	10,000	35,000	65,000	100,000

Source: Mombusho, 21 Seiki e no Ryugakusei Seisaku (1984)

* Research Associate, R.I.H.E., Hiroshima University

experience there is a lack of 1) actual facilities for housing students 2) policy on the guidance of foreign students 3) persons who can effectively guide and support foreign students academically and in their daily life problems. With large gaps in the above matters, a sudden increase such as the proposed one, is an invitation to a potential disaster.

In this paper an overview of the "policy" for foreign students guidance will be presented as well as an examination of the role and performance of two major support persons for guiding the foreign student in Japan – the major professor and the tutor. In addition some comments on the present situation and some possible guidelines for clarifying and strengthening the responsibilities of support persons for foreign students will be given.

I. Policy on Foreign Student Guidance

1) Mombusho (Ministry of Education, Science and Culture)

Since W.W.II the Japanese government has only very recently (1954) invited significant numbers of foreign students and there has been very little actual policy made by the government to insure that foreign students are getting proper guidance. Mombusho's key role is to delegate funds to universities for educating, housing and recently to some extent for guiding foreign students. Mombusho also has a role in the approval and placement of foreign students to their respective universities. One innovation carried out by Mombusho for foreign student guidance was the granting of a "Special guidance fund for foreign students". In 1972 the measure went into effect and universities began receiving these funds for government sponsored foreign students. In 1979 this fund was expanded to provide guidance funds for private students as well. These extra guidance funds were to be used for 4 main purposes: 1) As supplementary funds for extra-curricular activities or for special language courses 2) For home stay programs 3) Funds for paying Tutors 4) Funds for non-academic orientation activities i.e. camping or bus tours.

How these funds are actually used is left up to the discretion of the individual universities and there is little control over their use in appropriate guidance activities.

With this new system of providing guidance funds came the creation of the Tutor role, *a potentially* important support person for the guidance of foreign students. Mombusho's stance to date on tutors has been a "hands off" policy where the responsibility for policy making and guidelines on tutors has been passed on to the individual universities.

2) The Universities

Although decision making on foreign student problems and guidance is left up

to the individual universities, very little actual policy has been forthcoming at the institutional level. There are foreign student offices at most major national universities but these do not have any real decision making powers as to the guidance of foreign students. The function of such offices is clerical. Few if any national universities have separate independent counseling facilities staffed by persons with decision making powers or professional expertise in dealing with foreign student problems. The university does provide: 1) language courses (although inadequate and understaffed in a great majority of national universities) 2) joint health facilities 3) orientation activities of a non-academic nature (also very few and very limited).

Some exceptional offices will help in finding housing for foreign students but even this function is not well established or controlled. In the great majority of cases, the foreign student with living or academic difficulties which the professor cannot help with will be asked to turn to someone else. The Question is, *who* can the foreign student turn to? We must ask who is responsible for the guidance of foreign students.

II. Professors-Role and Performance

1) "Almighty Professors" – Their Role in Guidance

Whether the student or the professors themselves like it or not, professors are totally responsible for the foreign student once the foreign student is placed with them.

The foreign student's major professor decides:

1. Whether the student will get guidance or not.
2. What kind and how much guidance they will get.
3. Whether they will get additional research funds or not.
4. Whether or not they will be sent home for moral or political "mischief" or illness (physical or mental) which may be interfering with their studies.
5. Whether or not they will get a degree.
6. Whether or not they will be able to get extra guidance (to a large degree).
7. Who the foreign student's tutor will be.

In some cases another professor or associate professor will "look after" the foreign student but all major decisions concerning the foreign student (legal, academic and moral) must go through the major professor.

The major professor has almost total control over the foreign students' lives while they are in Japan, therefore, if the professor is: 1) interested in the foreign student 2) has time for the foreign student 3) has the same or similar study/research field as the foreign student, then a productive academic and interpersonal relationship is a

possibility. But when: 1) little interest 2) little time and 3) different fields of interest are the case, then serious guidance problems arise. These problems are much more serious for foreign students at Japanese universities since changing major professors is extremely difficult. For Mombusho (govt. sponsored) students, it is almost impossible to transfer to a new professor and even in the rare case where this is permitted it is a tedious and difficult process. In the case of private students there is a "taboo" against such actions and students are very hesitant to ask for transfers even if their major field has been mismatched with that of their professors. The background reasons for this taboo include a fear of troubling or insulting professors and possibly damaging their academic futures in Japan. Because of this "almighty role" it is necessary for professors to have one or more foreign students under their wings since there is virtually no one else with the power to guide, promote or make decisions on foreign students. *What will be the result when 30,000+ (see Table 1) foreign graduate students take up residence in Japanese graduate schools where there are very limited numbers of major professors?*

With the present system the guidance imbalance would be totally unmanageable since it is highly unlikely that great numbers of new professors will be added to existing faculties.

Of course, many professors here are giving excellent guidance and helping to educate a new generation of foreign students, but the consequences of inadequate concern for foreign students by professors is definitely a serious problem in a system where there are no alternative support persons for making major decisions. Thus, before inviting more students we must seriously consider the performance of professors.

2) How much are Professors helping?

An international survey of the adaptation and coping of foreign students (Klineberg and Hull, 1979) showed teaching staff at Japanese universities rated somewhat unsatisfactorily in comparison with foreign students ratings of teaching staff in other nations' universities. In Table 2 we can see Japanese teaching staff rated as somewhat less satisfactory than in most other countries for all of the four categories, particularly in intellectual stimulation provided and accessibility of the majority of teachers. This study however, had a comparatively small number of foreign students for Japan(30) in comparison with for example; U.S.(955), Canada(620), U.K.(370) etc.

A few domestic studies have also been done on foreign students in Japan. Some of these have included questions on the guidance and performance of professors

Table 2. Experience with the Teaching Staff

	Brazil	Canada	France	Hong Kong	India	Iran	Japan	Kenya	U.K.	U.S.	West Germany
In terms of your own personal experience with the teaching staff, how do you rate the following topics?											
1) The teaching quality in general	2.1	2.3	2.5	2.9	2.5	2.5	2.7	2.0	2.3	2.2	2.4
2) The helpfulness of teachers in general	2.3	2.3	2.6	2.4	2.4	3.0	2.6	2.2	2.0	2.1	2.7
3) Intellectual stimulation provided	2.5	2.5	2.9	3.0	2.7	3.3	3.0	2.0	2.3	2.4	2.7
4) Accessibility of the minds of teachers	2.4	2.4	3.2	2.8	2.7	3.0	3.0	2.4	2.4	2.2	2.5

Note: The above figures represent the means responses for each country sample on a scale of "very satisfactory" (value of 1) through "very unsatisfactory" (value of 5). "No comment/not applicable" and omit responses were not used in the calculation of the means.
Source: Compiled by the authors.

Table from Klineberg and Hull, 1979

(Tsukuba Study, 1982); (Research Institute for Higher Education Hiroshima University, 1982). A smaller scale study done by the present author from 1982-84 on the adjustment of foreign graduate students to Hiroshima University included a Likert scale adjustment index based on one by Baker (1984), a separate questionnaire on the perception of helping behavior from major support persons and a personal interview on the academic, social and emotional/psychological problems of foreign students. In all of these studies several questions were asked related to how students perceived the help they received from professors. It is difficult to say whether the results of any of these studies correctly reflects the actual feelings of the foreign students but data from these studies can be examined and compared.

The RIHE group reported the following results in their 1979 study of 490 graduate foreign students at 14 Japanese universities having large foreign student populations.

> "To the question: "How often do you meet your supervising professor to discuss your study", 28.8 percent of students met less than 10 times a year, followed by 18.2 percent of students who met 11-20 times, 14.7 percent who met 41-100 times a year. During a one year period in Japan, 0.8 percent of students reported that they have never met their supervising professors. 68 percent of students reported that they were given sufficient advice and supervision in their graduate study and 18.9 percent of students reported that they were given insufficient advice and supervision."

The Tsukuba study with 120 foreign research students attending Tsukuba at the time showed a generally high satisfaction level. 50% of these students responded that

they were getting "much more help than expected" from their major professors, 34.2% said they were getting "some degree of help" and 15.8% said they were "not getting as much help as expected".

Responses on related items of the scale questionnaire from the present authors' study showed similar findings. Students responded in the following way to the statement:

"I am not satisfied with guidance given to me by my Major professor".
Applies to me 1 2 3 4* 5 Does not apply to me

* Mean 4.13 Sd 1.02
75 Responses (25 persons X 3 Trials)

In this same study (Hicks) on a separate questionnaire to measure helping, students were asked to rate their major support persons as to Desired Help (1 – a little) to (3 – very much) and Actual Help (the same as the above) in 3 categories of Helping: Academic, Social/Interpersonal and Emotional/Personal. A rough measure-the helping gap (D – A $\geq$ 1) was taken as an indication of a lack of help. Full results can be seen as to the 3 Categories of help over 3 trials [Trial 1. – 2 months after arrival to Hiroshima University Trial 2. – 8 months after arrival and Trial 3. – 14 months after arrival.] in Table 3 and Figures 1,2 and 3. Over all 3 trials, 50% or more of the students reported that they were getting an average of $\geq$ 2 in actual academic helping from their professors (major professor associate professor and assistants included). The number of students reporting a helping gap increased slightly over trial. Significant numbers of students showed a gap in help from professors in social-interpersonal matters.

Table 3. % (N) of Foreign Students Reporting Help from Professors (All their professors)

	1st Trial			2nd Trial			3rd Trial		
	A	S	E	A	S	E	A	S	E
% with act. Help $\geq$ 2	64% (16)	36% (9)	32% (8)	64% (16)	24% (6)	20% (5)	56% (14)	40% (10)	32% (8)
% with act. Help = 0	8% (2)	40% (10)	48% (12)	4% (1)	28% (7)	56% (14)	0% (0)	40% (10)	48% (12)
% Gap (d – a) $\geq$ 1	36% (9)	20% (5)	28% (7)	40% (10)	40% (10)	16% (4)	44% (11)	32% (8)	24% (6)
% + Help (a – d) $\geq$ 1	8% (2)	4% (1)	4% (1)	8% (2)	8% (2)	0% (0)	4% (1)	4% (1)	4% (1)

3 = very much help 1 = a little help N = 25

* A = Academic Help S = Social-Interpersonal Help E = Personal-Emotional Help

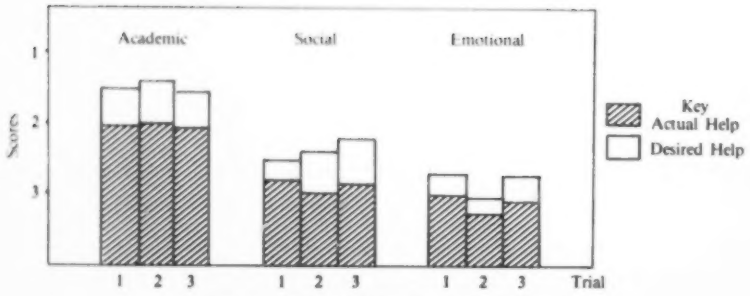


Fig. 1. Mean Helping Scores-Professors

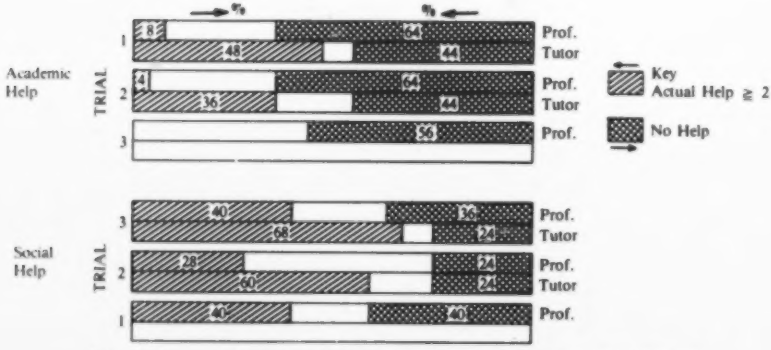


Fig. 2. Percent of Foreign Students Reporting Actual Help ≥ 2 or No Help From Professors and Tutors Over Trial

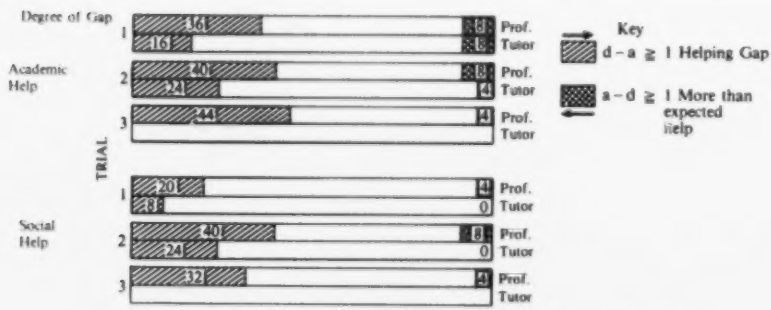


Fig. 3. Percent of Foreign Students Reporting Helping Gap or More Than Expected Help

Results from all of these studies points to a seemingly high level of satisfaction with guidance. However, data from the same 25 students obtained by personal interviews showed a somewhat different picture (See Appendix A). A major task of this interview study was to establish a trust relationship with foreign students which is not possible using a mail-questionnaire. It was hoped that more "frank" responses as to actual problems would be forthcoming using this type of interview.

From these interviews the following responses were recorded. Ten of the 25 students complained that the major professor was too busy and eleven of the 25 said they had serious guidance problems with their studies. Five students were mismatched as to their study fields. While the small number of students may not be a convincing sample, it is obvious that too many students in this sample are not getting enough guidance from their professors. A conflict of results between these studies and even in the same study can be seen here. This conflict may be due to a reluctance to criticize one's major professor in an "official situation" such as a formal written questionnaire. As well, quantification of the concept of "satisfaction" or "helping" is not an easy thing to properly evaluate; these concepts may be interpreted too loosely depending on the aims of the researchers. These results point to the need for more studies of the interview type in a trust relation with foreign students. Larger samples are important but this type of study is very time consuming and the development of a trust relationship between foreign student and interviewer requires particular skills.

These results also lead us to consider the role of the major professor. One of the greatest complaints of the foreign students was that the professor was too busy. What is the professor too busy doing? How much value the professor puts on the education of students both foreign and native is a critical factor in the adjustment process of students. If professors are too busy or not able to take care of foreign students there should be no obligation for them to do so. During the placement procedure, it is very important that willing, able and interested professors are matched with foreign students. A drastic increase in the number of foreign students would indeed put undue pressure on many professors who were not interested in foreign students or who do not have time to adequately guide and take care of foreign students. Another related problem is the "koza" and its research goals. If the foreign students goals do not match the goals of the "koza", there may be undue pressure on the foreign student to conform or the foreign student may not get the attention he/she needs due to differences in priorities. This problem also applies to Japanese students and is an important one for future studies on foreign students as well as for the sociology of higher education.

III. The Tutor-Role and Performance

Earlier in this paper, the special guidance fund for foreign students was mentioned. One of the ways this money is used is to pay for tutors. The tutor system is potentially one of the best ideas to have come out of the "foreign students policy system" in Japan but it is still far too ambiguous and limited in scope.

According to personal discussions with Mombusho officials, the tutor system began with the special guidance fund and was originally devised to support a "study friend" for the foreign student. Mombusho set no strict guidelines for what a tutor must do for a foreign student, but the Mombusho handbook points out that the function of study and research guidance is the responsibility of the tutor. The real decisions (as all real decisions on foreign student guidance) come from the Major professor. Some universities have made loose "policy" for foreign student tutors. Hiroshima University allows research assistants to be tutors in addition to having graduate students serve as tutors. Hiroshima Universities' latest "policy" on the subject is stated as follows:

> "Each student will be assigned a tutor. Under the general direction of an academic advisor, (Major professor) the tutor will help the foreign student with his/her studies in the Japanese language and specialized fields or indeed problems in daily life. The tutor is usually a senior student in the same field as that of the foreign student. Undergraduate students will have tutors for the first two years of their residence, and graduate students and research students for the first year. The tutor will be paid a small remuneration by the University."
>
> Hiroshima University, Bulletin (1980)

1) Problems in the Tutor Role

If we look at Hiroshima University policy and consider it to be more or less standard national university policy, it is obvious that the system is so loose that there is in effect no real policy. Serious problems arise when the tutor is seen as the only helper and support for the foreign student outside of the professor. The present ambiguous policy makes it possible to interpret the role of the tutor as a person who has to take care of all of the foreign students' needs. The tutor could be asked to perform all sorts of tasks from "apartment consultant" to "babysitter". Especially when the foreign student first arrives the tutor has to give far too much time-consuming assistance to the foreign student since these activities may be considered his/her "role" and because there may be no one else who will take responsibility. "Tutor burn out" may occur when tutors become so busy with many tasks related to the environmental, and

socio-cultural adjustment of the foreign student, that they become quite tired of the foreign student from the beginning. This may result in a hesitancy (quite natural) on the part of the tutor to give important guidance later on. Tutors are usually graduate students with part time jobs and theses to submit and many other responsibilities in and outside of the university. Since their guidance time is limited and precious, it is important to more clearly define the responsibilities of the tutor for the benefit of *both* tutor and foreign student. Little data is available on what role the foreign student expects the tutor to have but in the present authors' study it can be seen from Table 8 (Desired Help from Tutors) that foreign graduate students expect far more help with academic matters than other ones. While guidance with matters other than academic is a vital problem graduate foreign students seem to need most help with academic matters.

2) How Much are Tutors Helping?

A few studies have been done to assess the tutor performance. The study group from Tsukuba University in surveying 122 foreign students came up with the following results to a questionnaire on tutors: To the question "do you think your present tutor has given you enough help?", 62.3% of the respondents answered "yes", 13.1% answered "no" and 22.1% had no comment. Of those answering "yes" to that question (72), the following areas were listed as being ones where the tutor was helpful in:

Figure 4. On What Matters has the Tutor Been Helpful?

(N = 74)

TSUKUBA (1982)

The Tsukuba study showed time spent with tutors per month as follows:

It is questionable if this is enough guidance time. This study also asked "with whom can you discuss you worries best?". Replies can be seen in Table 5.

In the case of personal counseling the tutor was not seen as a major source of help. This fact in itself is not a particularly significant finding. Studies on foreign students in the U.S. i.e. Cohen, R.D. (1971) show the importance of the co-national group in

Table 4. How Often do You Meet Your Tutor?

N = 122

Hours per month	% of respondents
0 ~ 5	27.2
6 ~ 8	17.5
9 ~ 11	16.5
12 ~ 14	26.2
15 +	12.6
Total	100.0*

* Excluding "no response" answer

TSUKUBA (1982)

Table 5. With Whom Can You Discuss Your Worries Best?

(N = 121)

1. A student from your own country	49.6
2. A foreign student from another country	14.9
3. Your tutor	19.0
4. A Japanese student other than your tutor	9.9
5. Your academic advisor (Major professor)	39.7
6. A faculty member other than your academic advisor	2.5
7. Officers of the International Exchange division	11.6
8. Other office staff	0.0
9. Somebody living near you	4.1
10. Other	9.9

* Choose 2 items TSUKUBA (1982)

helping foreign students with personal problems. Most foreign students tend to go toward co-national groups for such help if they are available, but the tutor's role here could be expanded.

Data from the present author shows some definite problems in tutor guidance and help. These results were obtained in the same manner as in the previous section on desired and actual help from professors (see Tables 6, 7 and 8, Figs. 2 and 3). It is rather surprising to note from this data that: 48% of foreign students in the first trial and 36% in the second trial were getting no help with academic problems from their tutors. As well, about half of the students did not expect/desire any help from

their tutors in the first trial and 8 students did not desire help even by the second trial. The small number of foreign students reporting a helping gap (Fig. 3) is due to several students responding that they expected 0 help and were getting 0 help. This type of reply obviously does not result in a gap. It does, however, lead to the question as to "why the students did not expect any help at all?". This is not possible to determine exactly but one explanation may be that foreign students perceived tutors as being too busy or not interested in them and hence they did not expect help. Another explanation

Table 6. %(N) of Foreign Students Reporting Help From Tutors

	1st Trial			2nd Trial		
	A	S	E	A	S	E
% with act. help ≥ 2	44%(11)	24% (6)	12% (3)	44%(11)	24% (6)	12% (3)
% with act. help = 0	48%(12)	68%(17)	84%(21)	36% (9)	60%(15)	76%(19)
% gap (d − a) ≥ 1	16% (4)	8% (2)	8% (2)	24% (6)	24% (6)	8% (2)
% + help (a − d) ≥ 1	8% (2)	0% (0)	4% (1)	4% (1)	0% (0)	0% (0)

* Note: 3rd Trial date for Tutors was omitted due to some tutors finishing their terms of one year.

Table 7. Mean Scores Actual Help From Tutors

Trial		Academic	Social	Emotion
1st	NC	25	25	25
	Mean	1.160	0.600	0.320
	SD	1.222	0.938	0.786
2nd	NC	25	25	25
	Mean	1.280	0.720	0.400
	SD	1.150	1.001	0.800

Table 8. Mean Scores Desired Help From Tutors

Trial		Academic	Social	Emotion
1st	NC	25	25	25
	Mean	1.240	0.680	0.360
	SD	1.305	1.085	0.843
2nd	NC	25	25	25
	Mean	1.520	0.960	0.520
	SD	1.204	1.183	0.943

is that the role of the tutor was not clear to them, and they did not realize the potentially useful help they could be getting from them. Either interpretation points to a need to upgrade the performance of tutors as support persons for foreign students.

Here it must be pointed out that some tutors were helping more than expected and some were even helping to over-capacity. The following paragraph is a case study example of a tutor whose concern and care exemplifies the potential excellence of tutors.

In the case of subject X, the formal interview was canceled after the discovery of severe emotional distress. Subject X was diagnosed as suffering from a combination of mental disorders and showing manic-depressive and schizoid symptoms. Subject X was close to suicidal at the last phases of his brief stay in Japan which was terminated. The tutor of X offered his own apartment to the subject to live in while he looked out for him, loaned the subject money, and took him on vacations with him. The tutor supported the subject emotionally and made numerous attempts to get X to socialize more. In the final stages the tutor helped in getting X admitted to a hospital for treatment and personally escorted him to the airport when he returned home. During X's stay in Japan the tutor used a great deal of his free time in language teaching and tutoring on academic problems.

In personal interviews, results were not so favorable. Nine of the 25 students expressed serious guidance problems (academic) with their tutors. Most of these students expected academic guidance. Many students were glad to have support from tutors on other matters such as filling out forms and help with problems associated with their daily life, but examination of Appendix B shows too many students as having problems with their tutors.

Although these results are subject to bias on the part of the examiner they are indicative of problems and there is a very pressing need to re-evaluate the tutor system and improve on the definition of what a tutor should do.

IV. Towards an Improvement in the Present Situation

1) Recognizing the Imbalance in Guidance

In the previous chapters, there are indications of an imbalance in the workload i.e. responsibility taken for foreign students. One reason for this imbalance in responsibility is a general lack of coordination between agencies and individuals (see Figs. 5a and 5b). Communication and feedback from foreign students is also lacking. Fig. 6 is a very simple graphic presentation of the imbalance situation. Based on Fig. 6

this section will offer some comments on possible expansion of roles for improving foreign student guidance and the foreign student system.

Fig. 5a. Present Structure and Coupling in Foreign Student Affairs

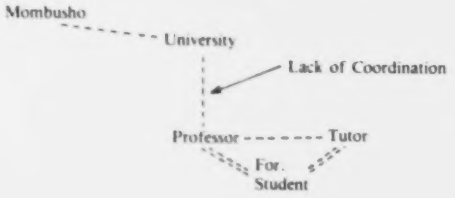


Fig. 5b. Proposed Structure and Coupling for Foreign Student Affairs

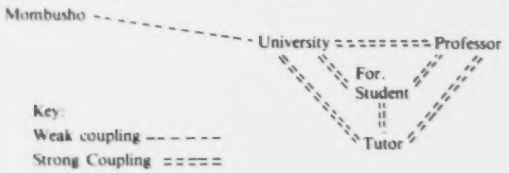


Fig. 6. Amount of Responsibility for Foreign Student Guidance

	Present Situation	Proposed Improvement
University	(1) (2)	(1) (2) (3) (4)
Professor	(1) (2) (3) (4)	(2) (3) (4)
Tutor	(1) (2) (3) (4)	(1) (2) (3) (4)

Key: Type of responsibility

1 Housing
2 Basic language training
3 Academic Guidance
4 Cultural-social guidance

2) Suggestions for Improvement

Mombusho's position in this figure lies outside of the mainstream due to its special role in funding and its indirect position on guidance. Mombusho could, however, strengthen its role as a coordinator among University, Professor and Tutor to increase their potential guidance roles. This could be done via: 1) Encouraging seminars on foreign student problems for university officials. 2) Collecting and distributing more information on the actual condition of foreign students to universities for feedback purposes. 3) Encouraging special seminars in cooperation with the universities on improving foreign students computer skills or practical skills.

Mombusho's rule as a provider of information could also be expanded. The editing of a book in English and or Chinese containing more specific information on Japanese universities would be very useful. Such books would be very useful in placement of foreign students and these could be made available to key foreign universities, consulates or embassies.

The university in Japan has not taken a positive or constructive enough role in foreign student affairs and guidance. For this reason as in Fig. 6, an increase in responsibility in the future is expected. The university could also take more of a role in coordination of foreign student affairs by including a foreign student specialist on the university staff. Such a person could serve as a mediator between foreign students and professors and should have academic qualifications. This kind of specialist could help to coordinate both university sponsored and community sponsored activities for the foreign student. Such a person could be helpful in times of emergencies and could help with problems of poor placement and legal problems as well.

A number of the possible functions the university could serve are: 1) Taking much more responsibility for housing, this would be free the tutors of this difficult task and allow them to spend their time more efficiently. 2) The establishment of special seminars for increasing foreign students academic skills i.e. computer seminars. 3) The establishment of training or introductory seminars for tutors, to help them get knowledge and practical advice as to how to work with and guide foreign students*. 4) Increase funds for tutors and if necessary increase the period of time of guidance from one year (graduate students) to one and a half or two years. This should depend on the needs of the foreign students. 5) Upgrade psychological services for foreign students. This need will increase in the future with the increase in number of students. It would be

* The present author is in the process of planning such a seminar

unfeasible to hire a full-time psychological counselor but establishing a part-time staff member or a part time position would be helpful. 6) Increase and improve language training facilities for foreign students. The present situation is completely inadequate, particularly in consideration of the establishment of a TOEFL-like test of Japanese as a foreign language which will soon be required by universities for admittance.

If professors choose to truly guide and work with foreign students then their load is the heaviest. As in Fig. 6 the universities could help by taking on more responsibility. If universities had better programs in language, for example, the academic guidance of the professor would be greatly enhanced. If special catch-up programs were available then professors would not have to spend so much time on remedial education. Professors could improve their actual guidance by: 1) Making sure the study plan of the foreign student fits the department. This should be ascertained as soon as the student arrives in Japan. It would be preferable if it could be ascertained before the student came to Japan, but if this is not possible it should be done as soon as can be arranged. Often the written study plans of foreign students do not give indications of the foreign students actual abilities or limitations. 2) In relation to the "fit" of the study plan, the students actual abilities must be evaluated as soon as possible. If there is a lack of "fit", a transfer should be made to a more appropriate department or university. 3) The professor should take care that his department members are cooperating with each other in guiding and helping the foreign student. The professor should see to it that one person does not have to do all of the work. 4) The professor should ensure that the tutor is a person of high ability and also a person who has an interest in foreign students. Tutors should be carefully chosen with regard to their available time, fit of major and personality.

The tutors role is also a heavy one if it is seriously carried out. Tutors should give as much guidance as they can and be ready to find others to help when they cannot. They should be "anchor persons" (Wapner 1980) for the foreign student. Tutors should serve to keep relations smooth between the major professor and the foreign student. They should also keep an eye out for possible emotional stress and be ready to refer the foreign student to a professional if severe problems occur. The tutor's rule will vary according to the abilities of the foreign student. If the foreign student has clear study goals and a concrete actualizable study plan and can do his/her academic work without guidance, then the tutor can concentrate more on helping with nonacademic matters. But in most cases, foreign students need considerable help with structuring their research and help with finding materials to carry out their work. The

tutor can be a very valuable guide in the foreign students' research and study. If time allows, the tutor can also help the foreign student in understanding Japanese culture and etiquette to help him/her in making social contacts. Tutors need orientation and training before taking on the difficult task of helping foreign students. As previously mentioned the establishment of "tutor seminars" would be very beneficial and an important part of a structured program for future foreign student guidance.

Conclusion

If we look carefully enough into the future it is not too difficult to see that Japan faces tremendous problems should its universities have to absorb this great increase in foreign students as proposed in the policy report to Mombusho. It would certainly be advisable to increase the number of foreign students, provided of course that they would be able to complete a satisfactory course of study with the guidance and facilities they need, particularly the vital guidance and support from professors. The present situation seems to indicate that Japanese universities are not at all ready for such a dramatic increase and that; 1) more experience and expertise, 2) a clearer definition of responsibility among persons and institutions responsible for foreign student guidance, 3) better coordination between institutions and persons responsible for foreign students, 4) better placement, and 5) more research on foreign students is needed. Furthermore, it would be interesting to speculate as to whether these problems also apply to Japanese graduate students as well.

Acknowledgements: The author acknowledges the kindness of the many foreign student who gave much of their energy and time in answering the questionnaires and interviews. In addition special thanks must be given to special people for their kind advice and assistance: Prof. Hiromi and Seiko Fukada, Mr. Wataru Inoue, Prof. Tohru Umakoshi and Mr. Hirotoshi Yamasaki.

Appendix A

Comments From Foreign Student Interviews - Professors

(* Signifies serious problem)

1. Major professor is transferring to another university and the new professor has a different major from mine.
2. No problems.
3. No problems but styles of communication are different from those of my country.
4. No problems but professor expects too much of me academically.

5. Professor relationship is good but I need more time with my professor to discuss my research and get help.

*6. Professor has little time for me, is not interested in foreign students only in his own research, uncooperative, doesn't help me, I cannot expect contact with him when I return although such contact would have been very useful for my work.

7. Sometimes it is difficult to catch my professor since he is so busy but if I make an appointment he will help me.

*8. I would like to get some advice and help from my professor but it is difficult to get in touch with him. I feel uneasy talking to the professor in Keigo. 'It is hard to talk on the same level, I feel uneasy because of this.

*9. I don't get enough guidance with my studies-professor is very very busy with other matters so I don't depend on him for very much.

*10. My major professor is sick and I'm having guidance problems – Professor is too busy – The distance between me and my professor is too far.

11. No problems.

12. Professor tries to help – does his best.

*13. Way of guidance is different here – everyone is so busy it is difficult to get guidance.

14. No specific problems but subject had to change major field to one he was not familiar with and felt uneasy with the professor since he didn't understand the terminology of the new field.

15. Relations with professor excellent.

16. Professor is too busy – My professor will change to another university soon and this will cause many problems.

*17. Professors' major is different from mine – I feel reluctant to visit his office – Professor expects too much from me in English and research ability.

18. Because of language it is difficult to talk with my professor – I want to meet my professor more often socially – Professor is busy.

*19. My field is completely different from my major professors'. Professor is kind and helpful but cannot help me with my research.

*20. My major professor will retire and I have to change to a new professor – Professor has too much control over my research topic. We have a conflict in how to approach research problems.

21. Good relations with professor – helps with research.

*22. Professor's relation is not good – I feel so far from my professor – too busy I cannot get guidance from any of my professors.

23. I had to change my major before I could get guidance – The hierarchy is very strong – "The professor is always right".

*24. Only if I ask do I get help – the professors don't try to guide me. I did not get appropriate guidance – Professors don't teach, they can criticize parts of my research papers but cannot give serious advice as to how to do a more productive study.

*25. My professor is very sick – He cannot help me very much – I feel hesitant to go to the other professors. I don't want to take up their time. The other professors' majors are different from mine.

Appendix B

*1. I changed tutors since the first one was too busy, unfortunately the second one was even busier. This tutor felt as if it was a hobby to be a tutor and not a job. My tutor could only meet at a specific time and never in between. Tutor was too busy with writing a thesis and doing part time work.

2. If I can get help from my professor and tutor in understanding theoretical problems I think I will be alright. I get advice from my tutor about how to get along with Japanese people.

*3. I don't depend on my tutor since most of my graduate student friends help me when I need it. My tutor is so busy that I have to help him. My tutor did not know anything about being a tutor – no training. The whole tutor – student relationship could have been more effective. Tutor should be more helpful, he should at least ask the foreign student where he needs help. Most tutors don't ask. They don't know what to do. The tutor should ask students to go places with him socially.

*4. First tutor did not help me at all with my studies or daily life problems. The tutor is now helping with daily life problems but neither of my tutors was helpful with my academic problems. Their major was quite different from mine. Also I didn't ask for help so much.

5. It was very difficult for me to write in Japanese so I began to write more more compositions – I got considerable help from my tutor in checking my writing and in help with reading difficult parts of books. I have a very good relation with my tutor.

*6. I don't get any guidance – Tutor is too young, he has no experience. He doesn't take time for me. He is busy with his part-time work. There is an age gap between

us. He doesn't know how to deal with me. He doesn't know and doesn't want to know my academic difficulties. – My tutor doesn't help me. I can't ask him to help, he's too busy. At first I expected help, but over time, I saw him to be too busy and at about the same level of a researcher as I was.

*7. My tutor is too pushy – I did not evaluate my tutor highly. He did not know how to deal with foreigners, he was very nosy about my personal affairs. If the members of the department are cooperative, there is no need for a tutor. My tutor would take ideas from me and use them in his own papers. I had to quit discussing my research with him.

8. Tutor helping to expectation.

*9. My tutor did not do anything. He said "let's study together" but we never did.

10. My tutor's major is different from mine and thus he can't help me very much at all from an academic or research standpoint. However, he does give me general advice about how to do my research and research methodology. He also checks and corrects my Japanese sentences.

11. Tutor helping to expectation.

12. Relations are normal. he doesn't force himself to help me.

13. Tutor helps me to prepare for my class presentations.

14. Tutor helping to expectation.

15. I rarely ask my tutor to help me with anything, but if I need to get something done he will help me with it. If I had a set schedule with my tutor it would have helped my adjustment here a great deal, but he was busy with his studies so I did not try so actively to contact him.

*16. My tutor helps me with shopping and Japanese but does not help so much with my field. This person is in a completely different field from mine and doesn't understand. This person is very busy and has little time. I would like a tutor with a major similar to mine. When I have problems with my study, I usually ask my tutor and although the tutor is too busy to give very much time, he will help me.

*17. My tutor was assigned to me from another department and this person has a completely different major from mine. At first the tutor helped me with Japanese but now the tutor is even too busy to do that.

18. No tutor problems.

19. No problems mentioned but little contact in general with tutor.

20. No tutor problems.

*21. Tutor does not help with studies, only with some routine daily life problems. Tutor

is not serious. Tutor had no training he is being a tutor according to what he thinks a tutor should be and not according to my needs. – Tutor is an undergraduate and I seem to have become HIS tutor. – Tutor is not at all interested in research, only in his future job.

22. Professor is too busy so tutor helps me – When I need help I go to my tutor. Every week he gives me 2 hours. – Even though the official time of duty for my tutor is over he still helps me when I need it.
23. No problem with tutor.
24. My tutor is helpful but there is no policy about what a tutor should do. I don't know whether my tutor is helping me as a personal favor or because it is his job.
25. No problem with tutor.

Bibliography

1) *21 Seiki e no Ryugakuseiseisaku,* Mombusho Gakujutsukokusaikyoku Ryugakuseika, 1984. (*Foreign Student Policy for the 21st Century,* Mombusho, 1984. In Japanese)
2) KLINEBERG, I., Hull, W.F., *At a Foreign University,* Praeger Publishers, 1979.
3) A Survey of opinion Among Foreign Students Concerning Japanese Graduate Education, R.I.H.E. Joint Research Project on the Internationalization of Higher Education, Research Institute for Higher Education – Hiroshima University. *Notes on Higher Education,* No. 52, February, 1982. (In Japanese with English Summary – out of print)
4) USUI, Mikoto, *Gaikokujinryugakusei no tame no Kyoiku Houhou – Shisaku kaizen nikansuru Kisoteki Kensyu,* Tsukuba Daigaku Working Group, 1982.
(*A Basic Study for the Improvement of Educational Methods and Policy for Foreign Students,* Tsukuba university Study Group – Working Paper, 1982. In Japanese)
5) BAKER, R.W. & SIRYK, B. "Measuring adjustment to college", *Journal of Counseling Psychology, 31,* 1984, pp.179-189.
6) *Hiroshima University Bulletin* 1984.
7) COHEN, Robert Douglas. *The Functions of a Co-National Group of Foreign Students in New York City,* Ph.D. dissertation, 1971.
8) WAPNER, S. 1980. Transactions of persons-in-environments: Some critical transitions. Article revised from the Presidential Address to the Eastern Psychological Association, Hartfort Connecticut, April 11.

R.I.H.E. INTERNATIONAL SEMINAR SERIES

1. Perspectives for the Future System of Higher Education, 1977, 149p. (January 1977)
2. Higher Education for the 1980s
   — Challenges and Responses — 1980, 189p. (December 1980)
3. Innovation in Higher Education
   — Exchange of Experiences and Ideas in International Perspective — 1981, 179p. (November 1981)
4. Comparative Approaches to Higher Education
   — Curriculum, Teaching and Innovations in an Age of Financial Difficulties — 1983, 248p. (December 1983)

Published by
Research Institute for Higher Education
Hiroshima University

227

1977

Perspectives for the Future System of Higher Education

		Page
Preface	Soichi Iijima	1 – 2
Program of Seminar		3 – 6
List of Participants		7 – 15
I. INTRODUCTION		17
Higher Education in Transition	Shigeto Tsuru	18 – 26
Ice Age or New Horizon	Clark Kerr	27 – 37
II. ACCESS		39
Access Versus Admission	Isao Amagi	40 – 47
Access to Mass Higher Education	Torsten Husén	48 – 60
III. STRUCTURE		61
European Structure of higher Education	Henri Janne	62 – 69
Strains in the Growing Structure	Michiya Shimbori	70 – 80
IV. TOWARD THE FUTURE SYSTEM OF HIGHER EDUCATION — Summary of Discussion —	Yoshiya Abe and Harlan Cleveland	81
1. New Frontiers of higher Education		82 – 86
2. Access		86 – 89
3. Structure		89 – 94
4. Conclusion		94 – 98
ADDENDA		99
1. Recommendations of the Ad Hoc Committee for the Study of Higher Education in Japan		100 – 103
2. Current Mutations in Undergraduate Education in U.S.A.		104 – 111
3. Relevant Statistics of Higher Education		112 – 133

4. Reference Materials and Bibliography ..... 134 – 136

JAPANESE SUMMARY ..... 137 – 149

1980

Higher Education for the 1980s—Challenges and Responses

Preface ..... Haruo Takeyama

Program of the Seminar

I. SOCIAL CHANGE AND HIGHER EDUCATION

Higher Education in an Age of Internationalization
..... Michio Nagai..... 8 – 15

The Clash of National Interests in Higher Education
..... Burton Clark..... 16 – 26

II. NEW ISSUES AND PERSPECTIVES

In Search for a System of Post-secondary Education
..... Kazuyuki Kitamura..... 28 – 35

The Outlook for Higher Education in the Next Two Decades
..... Howard Bowen..... 36 – 43

III. POLICY MAKING, PLANNING AND DEVELOPMENT

Paradise Regained? A Policy for Higher Education in the 1980s
..... Harold Perkin..... 46 – 59

Stability and Change in Japanese Higher Education
..... Ikuo Amano..... 60 – 70

IV. REFORM, INNOVATION AND EXPERIMENT

Universities: The Last 20 Years and the 10 Years to Come
..... Soichi Iijima..... 72 – 79

Higher Education Reform, Innovation, and Experiment:
Prospects for the 1980s ..... Alexander Astin..... 80 – 91

V. INTERNATIONAL COMPARISON

Japanese Higher Education for the 1980s: Continuity and
Change ..... Tetsuya Kobayashi..... 94 – 101

Higher Education for the 1980s: Challenges and Responses
..... Robert McCaig..... 102 – 110
Coping with the Crisis: Revitalizing Higher Education
..... T.J. Pempel..... 111 – 119
Higher Education in the 1980: A Third World Point of View
..... V. Selvaratnam..... 120 – 128
Issues of Higher Education in 1980s: The Case of Korea
..... Jongchol Kim..... 129 – 139
Higher Education for the 1980s: The Case of West Germany
..... Ulrich Teichler..... 140 – 151
Notes on Higher Education in Indonesia
..... William K. Commings..... 152 – 159
Higher Education in the 1980s: Some Key Issues in
Western European Countries ..... Dorotea Furth..... 160 – 172

VI. SUMMARY AND REPORT OF DISCUSSIONS
..... Yoshiya Abe and William K. Cummings..... 174 – 189

1981

INNOVATIONS IN HIGHER EDUCATION

– Exchange of Experiences and ideas in International Perspective –

Preface ..... Keiji Inaga

Part I **The Hiroshima/OECD Meeting of Experts on Higher Education (27 – 29 January 1981)**..... 1

Program of the Meeting and List of Participants..... 2 – 5

1. Innovations in Higher Education – Issues, Definitions, and Japanese Experiences..... Kazuyuki Kitamura..... 7 – 17

2. Inter-Country Exchange and Co-operation on Innovative Approaches to Higher Education "The Swedish Case" ..... Lennart Levin..... 18 – 30

3. Innovative Approaches to College Teaching in the United States ..... K. Patricia Cross..... 31 – 39

4. The Development of Non-University Higher Education in the United Kingdom ..... Sir Norman Lindop..... 40 – 54

5. Supplement to Sir Norman Lindop's Contribution ..... Edward L. Houghton..... 55 – 64

6. Curriculum Reform as an Instrument for the Promotion of Innovations – Experiences and Intentions in austria – ..... Sigurd Höllinger..... 65 – 73

7. Curriculum Development at Tsukuba ..... Fujio Ikado..... 74 – 86

8. The Current State and Problems of Teaching Methods at Universities and Colleges in Japan
..... Takashi Sakamoto..... 87 – 109

9. Useware of OHP..... Kunihiro Suetake..... 110 – 120

10. Summary of Discussions
..... George S. Papadopoulos..... 121 – 129

Part II **Seminar on Innovations in Higher Education in Comparative Perspective (10 – 11 March 1981)**..... 131

Program of the Seminar and List of Participants..... 132 – 133

11. Factors of Achievement and Failure in European Higher Education ..... Ladislav Cerych..... 135 – 146

12. Innovative Teaching in higher Education — An Asian Case..... Hong, Woong Sun..... 147 – 154

13. The Ups and Downs of Innovations in U.S. Colleges and Universities ..... Janet Ruyle..... 155 – 168

14. Linkages Between Universities and Non-Universities
..... Frederick K. Kintzer..... 169 – 179

1983

COMPARATIVE APPROACHES TO HIGHER EDUCATION

—Curriculum, Teaching and Innovations in an Age of Financial Difficulties

Preface ..... Keiji Inaga i – ii

Part I **Higher Education in the International Age**

1. The Role of the University in International Understanding
..... by Michio Nagai..... 3 – 11
2. The "Internationalization" of Higher Education in Japan
..... by Kazuyuki Kitamura..... 12 – 24

Part II **Curriculum and Teaching**

3. Who Owns the University Curriculum?
..... by A.H. Halsey..... 27 – 32
4. Curriculum Reform in Hiroshima University
—The Case of the Faculty of Integrated Arts and Sciences
..... by Hisashi Shikibu..... 33 – 41
5. Curriculum and Instruction in Colleges and Universities
..... by Paul L. Dressel..... 42 – 53
6. Pilot Institutes for Higher Education Reform in Korea
..... by Jeung Rhee..... 54 – 70
7. Innovations in American higher Education: Curriculum and Teaching ..... by Philip G. Altbach..... 71 – 78
8. Improvements in College Teaching in the United Kingdom
..... by Roy Joseph Cox..... 79 – 87

Part III **Reforms and Innovations**

9. Comparative University Reform
..... by Philip G. Altbach..... 91 – 99
10. Innovation of Higher Education in Japan: The Case of the University of Tsukuba ..... by Sho Takakura..... 100 – 109
11. A Strategy for Innovation of Chungnam National University
—A Korean Case ..... by Myong Won Suhr..... 110 – 115

12. Reforms in Chinese Higher Education
..... by Cheng Su..... 116 – 121
13. Innovations in Thai Higher Education
..... by Iam Chaya Ngam..... 122 – 133
14. Staff Development in higher Education – Experience
in Britain..... by Roy Joseph Cox..... 134 – 145

Part IV **Open Universities and Adult Education**
15. Sukhothai Thammathirat – Thailand's Open University
..... by Iam Chaya Ngam..... 149 – 166
16. History and Prospect of the Korean Air
and Correspondence College ..... by Myong Won Suhr..... 167 – 172
17. Adult Learning in Japanese Higher Education
..... by Masakazu Yano..... 173 – 191

Part V **Higher Education in the Age of Financial Difficulties**
18. Japanese Higher Education in an Age of
Financial Difficulties..... by Morikazu Ushiogi..... 195 – 206
19. On the Financial Troubles of Universities
..... by A.H. Halsey..... 207 – 211
20. Financing Problems for Higher Education in Korea
..... by Jeung Rhee..... 212 – 228
21. Higher Education in the Age of Financial Difficulties
..... by Paul L. Dressel..... 299 – 240